

326552

STIC-EIC1600/2900

From: STIC-EIC1600/2900@uspto.gov
Sent: Monday, March 29, 2010 9:14 AM
To: Underdahl, Thane E. (AU1661)
Cc: STIC-EIC1600/2900
Subject: Confirmation Receipt: 1600 Search Request - 10597378

This is an automated email confirming that your 1600 Search Request has been received by STIC's EIC1600.

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Requester

Name: UNDERDAHL, THANE E

Organization: TC 1600

Art Unit: 1651

Employee Num:

Office Location:

Phone Number:

Email: thane.dahl@uspto.gov

Request Detail

Attachment: CoQ10 Pic.png

Case/Application number: 10597378 PALM

Priority App. Filing Date: 10597378

Format for Search Results: SCORE

Meaning of unusual acronyms or initialisms:

CoQ10= Coenzyme Q10=ubiquinone=ubidecenenone or simply coenzyme Q. It has a CAS number of 303-98-0, the chemical structure is well known and the IUPAC name is HUGE.

Identify the novelty:

a composition of 0.01-30% w/w of CoQ10 can treat cancer, any cancer (See Claim 1). They also claim that a CoQ10 composition to 1.5-4mg per kg body wt applied topically can treat cancer.

Additional Comments:

I'd like any art that has CoQ10 directly treating cancer in any species. Since CoQ10 compositions are well known (as sunscreens, food, culture media) the big point to search is how well they treat cancer. Thanks for doing this! This Application was published as US 2008/0299100 on Dec 4, 2008

3/29/2010

4B

=> file registry
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Property values tagged with IC are from the ZIC/VINITI data file

10/597378

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1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:CLASS 17:CLASS 18:CLASS
19:CLASS 20:CLASS
21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS
29:CLASS 30:CLASS
31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS
39:CLASS 40:CLASS
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FILE COVERS 1907 - 29 Mar 2010 VOL 152 ISS 14
FILE LAST UPDATED: 28 Mar 2010 (20100328/ED)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2009
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

ZCAplus now includes complete International Patent Classification (IPC) reclassification data for the first quarter of 2010.

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<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

'OBI' IS DEFAULT SEARCH FIELD FOR 'ZCPLUS' FILE

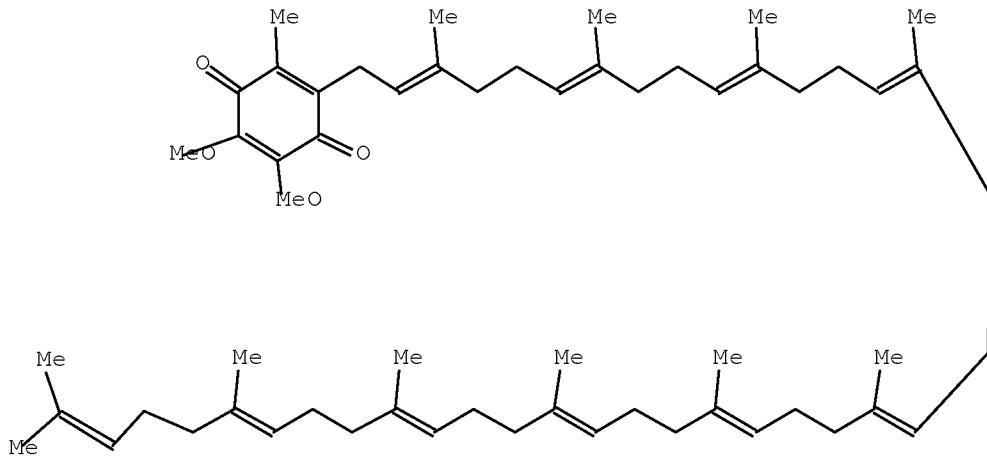
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10/597378

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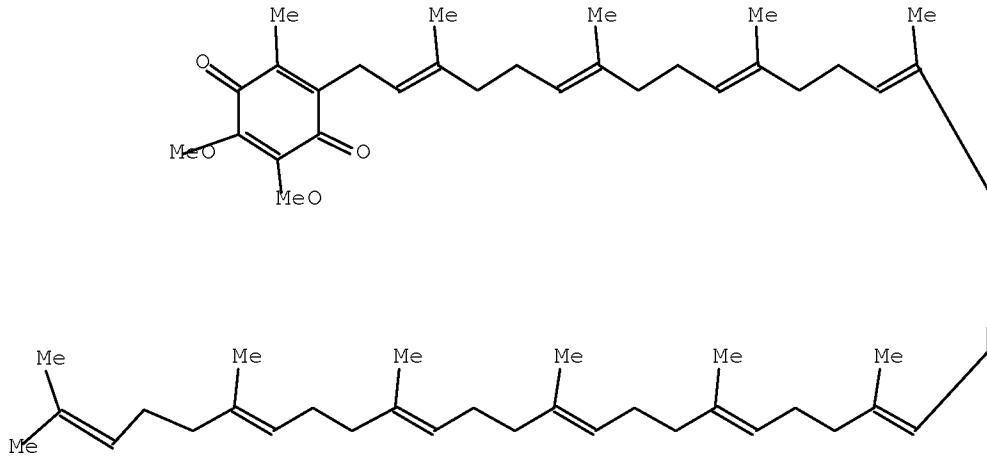


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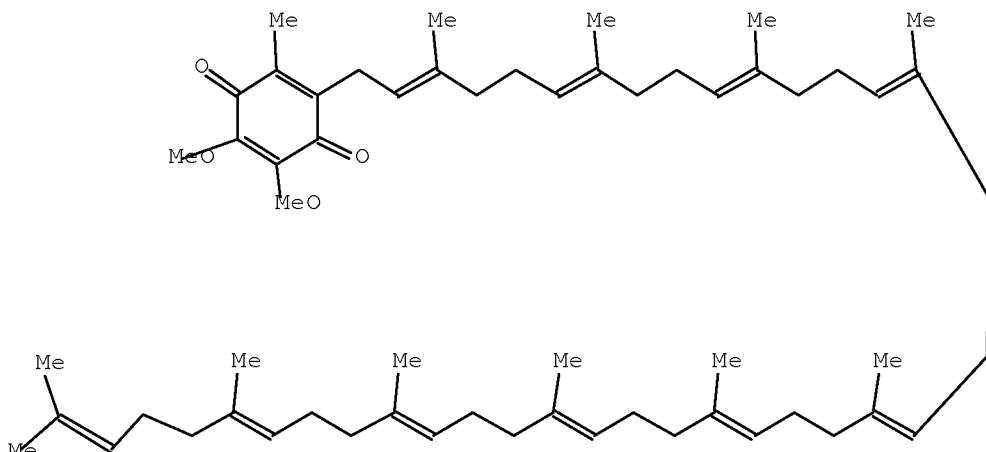
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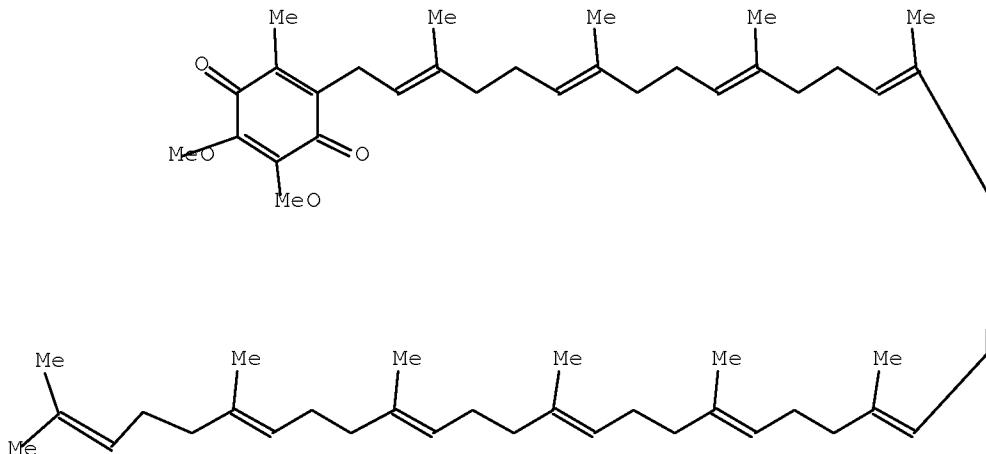
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L86 12 L80 OR L82

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PROCESSING COMPLETED FOR L85

PROCESSING COMPLETED FOR L86

PROCESSING COMPLETED FOR L78

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ANSWERS '1-24' FROM FILE ZCAPLUS

ANSWERS '25-37' FROM FILE BIOSIS

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L87 ANSWER 1 OF 37 ZCAPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 1

ACCESSION NUMBER: 2007:1303119 ZCAPLUS Full-text

DOCUMENT NUMBER: 147:528171

TITLE: Topical co-enzyme Q10 formulations and treatment of pain, fatigue and wounds

INVENTOR(S): Asia, Sung I.; Narain, Niven R.; Persaud, Indushekhar

PATENT ASSIGNEE(S): University of Miami, USA

SOURCE: PCT Int. Appl., 48pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

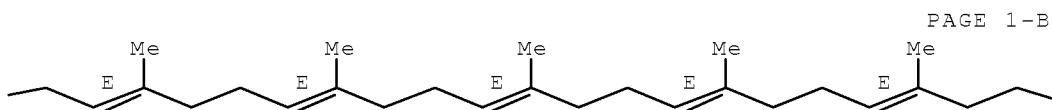
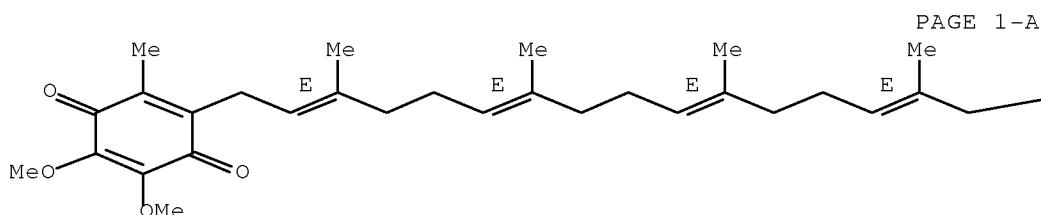
FAMILY ACC. NUM. COUNT: 1

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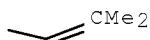
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US 20100062048	A1	20100311	US 2009-299354	20090903
PRIORITY APPLN. INFO.:			US 2006-797008P	P 20060502
			WO 2007-US68052	W 20070502
AB	CoQ10 has a stimulatory effect on fibroblasts and keratinocytes, increases ATP production, decreases pain. The formulations are useful for promoting acute wound healing, fatigue and treatment of acute and chronic pain. Q10 administration to human aortic smooth muscle cells increases ATP production and implies that the phospholipid vehicle (liposomes) is effective in delivering exogenous Q10 to cells.			
CC	63-6 (Pharmaceuticals)			

Section cross-reference(s): 13
 IT 303-98-0, Coenzyme Q10
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (topical coenzyme Q10 formulations and treatment of pain, fatigue and wounds)
 IT 303-98-0, Coenzyme Q10
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (topical coenzyme Q10 formulations and treatment of pain, fatigue and wounds)
 RN 303-98-0 ZCPLUS
 CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



L87 ANSWER 2 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN DUPLICATE 4
 ACCESSION NUMBER: 2005:696614 ZCPLUS Full-text
 DOCUMENT NUMBER: 143:159636
 TITLE: Topical Coenzyme Q10 formulations
 INVENTOR(S): Hsia, Sung Lan; Narain, Niven Rajin; Li, Jie;
 Russell, Kathryn J.; Woan, Karrune V.; Persaud,
 Indushekkhar
 PATENT ASSIGNEE(S): University of Miami, USA
 SOURCE: PCT Int. Appl., 86 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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AU 2005206953	A1	20050804	AU 2005-206953	20050121
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			WO 2005-US1581	W 20050121

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Topical formulations of CoQ10 reduce the rate of tumor growth in an animal subject. In the expts. described herein, CoQ10 was shown to increase the rate of apoptosis in a culture of skin cancer cells but not normal cells. Moreover, treatment of tumor-bearing animals with a topical formulation of CoQ10 was shown to dramatically reduce the rate of tumor growth in the animals. Thus, a kit comprised Coenzyme Q10, Phospholipon-90, glycerol, BHT, ethanol, medium chain triglycerides and lavender.

IC ICM A61K

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1

IT Antitumor agents
Apoptosis
Human
Lavandula
Neoplasm
(topical Coenzyme Q10 formulations)

IT 303-98-0, Coenzyme Q10
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(topical Coenzyme Q10 formulations)

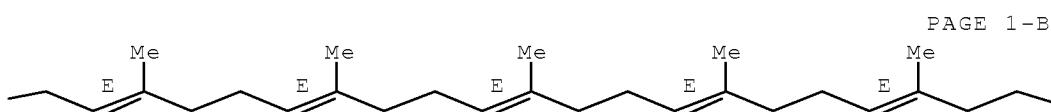
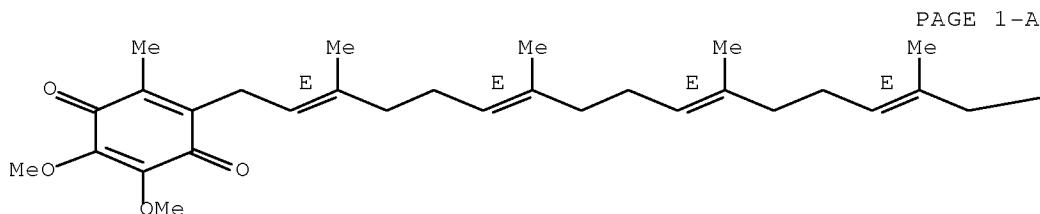
IT 303-98-0, Coenzyme Q10
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(topical Coenzyme Q10 formulations)

10/597378

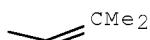
RN 303-98-0 ZCPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 3 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:1402763 ZCPLUS Full-text
DOCUMENT NUMBER: 151:537058
TITLE: Methods and compositions for the treatment or prevention of pathological cardiac remodeling and heart failure
INVENTOR(S): Yan, Chen; Li, Jian-Dong
PATENT ASSIGNEE(S): University of Rochester, USA
SOURCE: PCT Int. Appl., 50pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2009137465	A2	20091112	WO 2009-US42823	20090505

WO 2009137465 A3 20091230
 W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,
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 FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE,
 KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
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 PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,
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 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
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 ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: US 2008-50308P P 20080505

AB The invention relates to methods of treating or preventing pathol. cardiac remodeling and/or preventing heart failure. These methods include the administration of a PDE1 inhibitor to a patient under conditions effective to treat or prevent pathol. cardiac remodeling, and therefore heart failure that occurs as a result of such remodeling. Pharmaceutical compns. and delivery vehicles that can be used in the methods of the present invention are also disclosed herein.

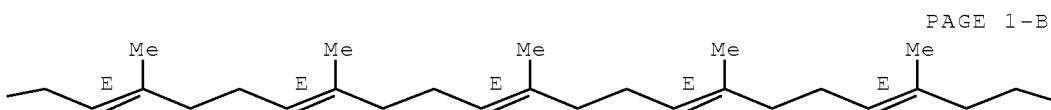
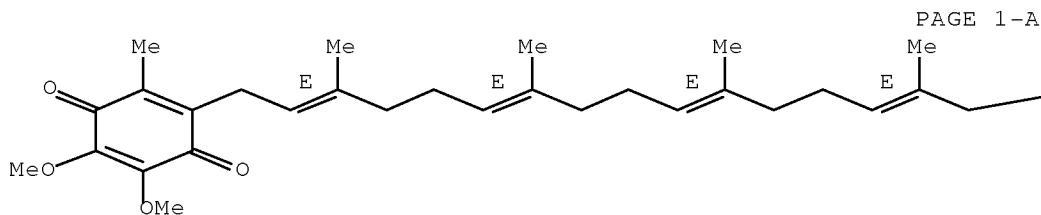
CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1

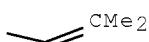
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 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (methods and compns. for treatment or prevention of pathol. cardiac
 remodeling and heart failure)
 IT 303-98-0, Coenzyme Q10
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (methods and compns. for treatment or prevention of pathol. cardiac
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 RN 303-98-0 ZCAPLUS
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 tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



L87 ANSWER 4 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2009:1260432 ZCPLUS Full-text
 DOCUMENT NUMBER: 151:418146
 TITLE: Methods and use of exogenous coenzyme Q10, or a metabolite thereof, for inducing apoptosis in cancer cells
 INVENTOR(S): Narain, Niven Rajin; Persaud, Indushekhar; McCook, John Patrick
 PATENT ASSIGNEE(S): Cytotech Labs, LLC, USA
 SOURCE: PCT Int. Appl., 54pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009126764	A1	20091015	WO 2009-US39992	20090409
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
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TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2008-44085P P 20080411

AB The invention provides a method for inducing apoptosis in a **cancer** cell by delivery of exogenous coenzyme Q10 or metabolites thereof in a pharmaceutically acceptable carrier to effectuate cell contact of endogenous coenzyme Q10 or metabolites thereof in addition to but not limited to mevalonic acid and oleic acid to form an intracellular complex. The invention also provides a method for modulating the p53 pathway and Bcl-2 protein family in a manner that restores the apoptotic potential to a **cancer** cell by delivery of coenzyme Q10 in a pharmaceutically acceptable carrier. The invention further provides a method to specifically normalize the ratio of pro-apoptotic and anti-apoptotic members of the Bcl-2 gene family in a proportion to re-program a **cancer** cell to undergo apoptosis.

CC 1-6 (Pharmacology)

ST **cancer** apoptosis induction coenzyme Q10

IT Proteins

RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
(BIK (Bcl-2-interacting killer), BH3 binding domain; exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in **cancer** cells)

IT Proteins

RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
(Bak; exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in **cancer** cells)

IT Proteins

RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
(Bax; exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in **cancer** cells)

IT Protein motifs

(Bcl-2 family BH3 binding domain; exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in **cancer** cells)

IT Proteins

RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
(Bcl-2, Bsl-2 subfamily members; exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in **cancer** cells)

IT Proteins

RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
(Bcl-2; exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in **cancer** cells)

IT Proteins

RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
(Bcl-xL; exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in **cancer** cells)

IT Proteins

RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
(Bid, BH3 binding domain; exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in **cancer** cells)

IT Proteins

RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
(Bim, BH3 binding domain; exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in **cancer** cells)

- IT Transcription factors
 - RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 - (HIF-1 α (hypoxia-inducible factor 1 α); exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in cancer cells)
- IT Proteins
 - RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 - (Mcl-1 (myeloid cell leukaemia sequence-1); exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in cancer cells)
- IT Angiogenesis
 - Angiogenesis inhibitors
 - Antitumor agents
 - Apoptosis
 - Cell cycle
 - Mammary gland, neoplasm
 - Melanoma
 - Neoplasm
 - Pharmaceutical aerosols
 - Pharmaceutical creams
 - Pharmaceutical foams
 - Pharmaceutical gels
 - Pharmaceutical liposomes
 - Pharmaceutical liquids
 - Pharmaceutical ointments
 - Pharmaceutical sprays
 - Pharmaceutical suppositories
 - Prostate gland, neoplasm
 - (exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in cancer cells)
- IT Angiogenic factors
 - Quinones
 - Transcription factor Smad
 - Transforming growth factor β
 - p53 (protein)
 - RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 - (exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in cancer cells)
- IT Phospholipids
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in cancer cells)
- IT Membrane, biological
 - (lipids; exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in cancer cells)
- IT Lipids
 - RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
 - (membrane; exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in cancer cells)
- IT Drug delivery systems
 - (mousse; exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in cancer cells)
- IT Pharmaceutical powders
 - (nebulized; exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in cancer cells)
- IT Drug delivery systems

(salve; exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in cancer cells)

IT Pharmaceutical emulsions
Topical drug delivery systems
(topical lotions; exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in cancer cells)

IT 112-80-1, Oleic acid, biological studies 150-97-0, Mevalonic acid 62031-54-3, FGF 86090-08-6, Angiostatin 115926-52-8, PI3 kinase 127464-60-2, VEGF 148640-14-6, Akt kinase 150428-23-2, Cyclin-dependent kinase 169592-56-7, Caspase 3
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); BIOL (Biological study)
(exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in cancer cells)

IT 303-98-0, Coenzyme Q10
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in cancer cells)

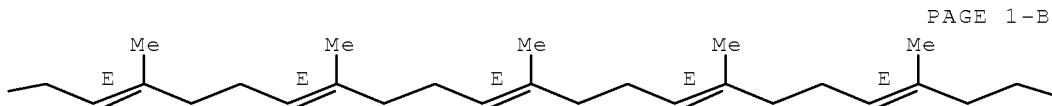
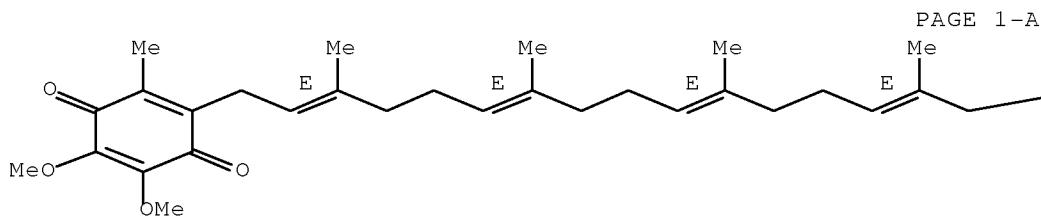
IT 303-98-0D, Coenzyme Q10, metabolites
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in cancer cells)

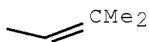
IT 303-98-0, Coenzyme Q10
RL: ADV (Adverse effect, including toxicity); BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in cancer cells)

RN 303-98-0 ZCAPLUS

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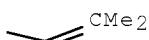
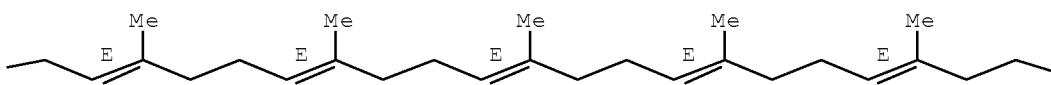
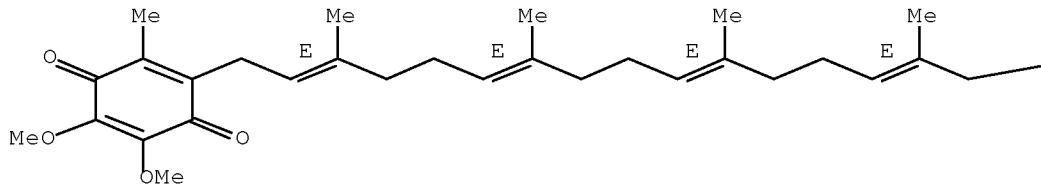
Double bond geometry as shown.





IT 303-98-0D, Coenzyme Q10, metabolites
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (exogenous coenzyme Q10 or coenzyme Q10 metabolite for apoptosis induction in cancer cells)
 RN 303-98-0 ZCAPLUS
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Double bond geometry as shown.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 5 OF 37 ZCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2009:918124 ZCAPLUS Full-text
 DOCUMENT NUMBER: 151:166952
 TITLE: Assay system for the assessment of oncogenicity, tumor progression, and treatment efficacy
 INVENTOR(S): Narain, Niven Rajin; Persaud, Indushekhar
 PATENT ASSIGNEE(S): Cytotech Labs, LLC, USA

10/597378

SOURCE: PCT Int. Appl., 29pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009094619	A1	20090730	WO 2009-US31957	20090126
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: US 2008-23570P P 20080125

AB Systems and kits are provided which are capable of determining the oncogenicity of a cancer, tumor progression, and effectiveness of a cancer treatment. Such systems and kits utilize assays to examine the levels of apoptotic markers, angiogenesis markers, immunomodulation markers, and cell cycle markers and can compare samples from a patient taken at different times to determine the oncogenicity of a cancer, tumor progression, and effectiveness of a cancer treatment. Methods for determining the oncogenicity of a cancer, tumor progression, and effectiveness of a cancer treatment with such systems and kits are also provided.

CC 9-1 (Biochemical Methods)

Section cross-reference(s): 1, 14

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 6 OF 37 ZCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2009:710042 ZCAPLUS Full-text

DOCUMENT NUMBER: 151:64011

TITLE: Inhalable compositions having enhanced bioavailability

INVENTOR(S): Persaud, Indushakhar; McCook, John Patrick; Narain, Niven Rajin

PATENT ASSIGNEE(S): Cytotech Labs, LLC, USA

SOURCE: PCT Int. Appl., 54pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2009073843	A1	20090611	WO 2008-US85669	20081205
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ,				

TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
 IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
 TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

PRIORITY APPLN. INFO.: US 2007-992787P P 20071206

AB The present disclosure provides methods and compns. suitable for delivering lipophilic bioactive agents, such as Coenzyme Q10 (CoQ10). The compns. may be utilized to treat numerous diseases and conditions that would benefit from the application of a lipophilic bioactive agent. In embodiments the compns. may be introduced by inhalation. Thus, particles and respirable aggregates of CoQ10 were prepared by a spray freezing into liquid method in presence of Polysorbate 80.

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1

IT Absorbents

Analgesics

Anthelmintics

Anti-inflammatory agents

Antianginal agents

Antiarrhythmics

Antibacterial agents

Anticoagulants

Anticonvulsants

Antidepressants

Antidiabetic agents

Antifoaming agents

Antigout agents

Antihistamines

Antihypertensives

Antimalarials

Antimicrobial agents

Antimigraine agents

Antiobesity agents

Antiosteoporotic agents

Antioxidants

Antiparkinsonian agents

Antipsychotics

Antithyroid agents

Antitumor agents

Antiviral agents

Anxiolytics

Buffers

Cognition enhancers

Cyclooxygenase 2 inhibitors

Dietary supplements

Diuretics

Drug bioavailability

Drug toxicity

Encapsulation

Fungicides

Gastrointestinal agents

Human

Humectants

Hypnotics and Sedatives

Immunosuppressants

Inhalation drug delivery systems

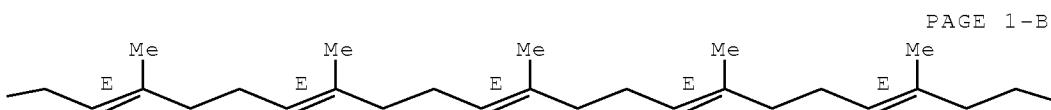
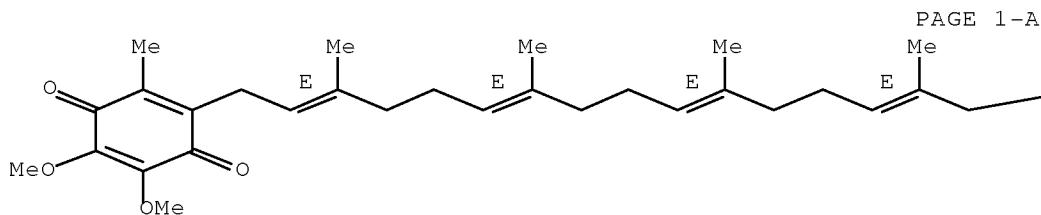
Inotropics

Leukotriene antagonists

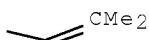
Lung
 Muscarinic antagonists
 Muscle relaxants
 Nervous system stimulants
 Particle size
 Pharmaceutical liposomes
 Pharmaceutical particles
 Protozoacides
 Solubilizers
 Solvents
 Thickening agents
 Tranquilizers
 β -Adrenoceptor antagonists
 (inhalable compns. of lipophilic drugs having enhanced bioavailability)
 IT Lung, neoplasm
 Neoplasm
 (treatment of; inhalable compns. of lipophilic drugs having enhanced bioavailability)
 IT 50-14-6, Ergocalciferol 50-21-5D, Lactic acid, derivs. 50-24-8,
 Prednisolone 50-99-7D, Glucose, deoxy derivs., salts 51-48-9,
 L-Thyroxine, biological studies 52-01-7, Spironolactone 53-43-0,
 Dehydroepiandrosterone 55-98-1, Busulfan 57-50-1D, Saccharose, fatty
 acid esters 57-83-0, Progesterone, biological studies 66-76-2,
 Dicoumarol 67-20-9, Nitrofurantoin 67-45-8, Furazolidone 67-96-9,
 Dihydrotachysterol 67-97-0, Cholecalciferol 76-57-3, Codeine
 76-99-3, Methadone 77-92-9D, Citric acid, derivs. 87-33-2, Isosorbide
 dinitrate 90-82-4, Pseudoephedrine 96-26-4, Dihydroxy acetone
 104-31-4, Benzonate 110-15-6D, Butanedioic acid, derivs. 110-17-8D,
 Fumaric acid, derivs. 110-94-1D, Glutaric acid, derivs. 113-15-5,
 Ergotamine 113-92-8 122-99-6, Phenoxyethanol 125-84-8,
 Aminoglutethimide 126-07-8, Griseofulvin 127-17-3D, Pyruvic acid,
 derivs. 127-40-2, Lutein 141-82-2D, Malonic acid, derivs. 143-19-1,
 Sodium oleate 151-21-3, Sodium dodecyl sulfate, biological studies
 154-17-6, 2-Deoxyglucose 155-97-5, Pyridostigmine 298-46-4,
 5H-Dibenz[b,f]azepine-5-carboxamide 298-57-7, Cinnarizine 298-81-7,
 Methoxsalen 300-62-9, Amphetamine 302-79-4, Tretinoin 303-49-1,
 Clomipramine 303-53-7, Cyclobenzaprine 303-98-0, Coenzyme Q
 10 321-64-2, Tacrine 359-83-1, Pentazocine 378-44-9, Betamethasone
 404-86-4, Capsaicin 437-38-7, Fentanyl 443-48-1, Metronidazole
 502-65-8, Lycopene 511-12-6, Dihydroergotamine 520-85-4,
 Medroxyprogesterone 595-33-5 911-45-5, Clomiphene 1134-47-0,
 Baclofen 1397-89-3, Amphotericin B 1406-16-2, Vitamin D 1406-18-4,
 Vitamin E 1951-25-3, Amiodarone 1972-08-3, Tetrahydrocannabinol
 3573-50-0, 6-Deoxyglucose phosphate 4419-39-0, Beclomethasone
 4759-48-2, Isotretinoin 5104-49-4, Flurbiprofen 5343-92-0, Hydrolite 5
 6915-15-7D, Malic acid, derivs. 7261-97-4, Dantrolene 7658-08-4,
 6-Deoxyglucose 7689-03-4, Camptothecin 9003-39-8D, PVP, conjugates
 with phosphatidylethanolamine 9004-54-0D, Dextran, polyoxyalkylene
 derivs. 9004-65-3, Methocel E3 9004-98-2, Brij 98 9005-63-4D,
 Polyoxyethylene sorbitan, fatty acid esters 9005-65-6, Polysorbate 80
 10540-29-1, Tamoxifen 11103-57-4, Vitamin A 12001-79-5, Vitamin K
 15307-86-5, Diclofenac 15574-96-6, Pizotifen 15686-51-8, Clemastine
 15687-27-1, Ibuprofen 17230-88-5, Danazol 18559-94-9, Albuterol
 19356-17-3, Calcifediol 20594-83-6, Nalbuphine 20830-75-5, Digoxin
 21256-18-8, Oxaprozin 21829-25-4, Nifedipine 22916-47-8, Miconazole
 23288-49-5, Probucol 25322-68-3D, Polyethylene glycol, derivs.
 25523-97-1, Dexchlorpheniramine 25812-30-0, Gemfibrozil 27203-92-5,
 Tramadol 29094-61-9, Glipizide 29767-20-2, Teniposide 32222-06-3,
 Calcitriol 33069-62-4, Paclitaxel 33419-42-0, Etoposide 34090-49-8,
 2-Deoxyglucose phosphate 34911-55-2, Bupropion 38304-91-5, Minoxidil

41340-25-4, Etodolac 42924-53-8, Nabumetone 43200-80-2, Zopiclone
 49562-28-9, Fenofibrate 49697-38-3, Rimexolone 51322-75-9, Tizanidine
 51333-22-3, Budesonide 51481-61-9, Cimetidine 53123-88-9, Sirolimus
 53179-11-6, Loperamide 53230-10-7, Mefloquine 54965-21-8, Albendazole
 55079-83-9, Acitretin 55142-85-3, Ticlopidine 59467-70-8, Midazolam
 59865-13-3, Cyclosporine 60142-96-3, Gabapentin 61379-65-5,
 Rifapentine 61869-08-7, Paroxetine 62013-04-1, Dirithromycin
 63590-64-7, Terazosin 63612-50-0, Nilutamide 63675-72-9, Nisoldipine
 65271-80-9, Mitoxantrone 65277-42-1, Ketoconazole 68506-86-5,
 Vigabatrin 69756-53-2, Halofantrine 70288-86-7, Ivermectin
 72432-03-2, Miglitol 72559-06-9, Rifabutine 73590-58-6, Omeprazole
 73963-72-1, Cilostazole 74103-06-3, Ketorolac 75330-75-5, Lovastatin
 75706-12-6, Leflunomide 76547-98-3, Lisinopril 76824-35-6, Famotidine
 76963-41-2, Nizatidine 79617-96-2, Sertraline 79794-75-5, Loratadine
 79902-63-9, Simvastatin 81093-37-0, Pravastatin 81098-60-4, Cisapride
 81103-11-9, Clarithromycin 82626-48-0, Zolpidem 83799-24-0,
 Fexofenadine 83881-51-0, Cetirizine 83905-01-5, Azithromycin
 84057-84-1, Lamotrigine 84371-65-3, Mifepristone 84449-90-1,
 Raloxifene 84625-61-6, Itraconazole 85721-33-1, Ciprofloxacin
 86386-73-4, Fluconazole 86541-75-5, Benazepril 88150-42-9, Amlodipine
 89778-26-7, Toremifene 90357-06-5, Bicalutamide 91161-71-6,
 Terbinafine 93390-81-9, Fosphenytoin 93413-69-5, Venlafaxine
 93479-97-1, Glimepiride 93957-54-1, Fluvastatin 95233-18-4, Atovaquone
 97240-79-4, Topiramate 97322-87-7, Troglitazone 97682-44-5, Irinotecan
 98319-26-7, Finasteride 101828-21-1, Butenafine 103577-45-3,
 Lansoprazole 103628-46-2, Sumatriptan 104987-11-3, Tacrolimus
 106133-20-4, Tamsulosin 106392-12-5, Polyoxyethylene-polyoxypropylene
 block copolymer 106650-56-0, Sibutramine 107753-78-6, Zafirlukast
 111025-46-8, Pioglitazone 111406-87-2, Zileuton 112965-21-6,
 Calcipotriene 113665-84-2, Clopidogrel 115103-54-3, Tiagabine
 117976-89-3, Rabeprazole 118292-40-3, Tazarotene 120014-06-4,
 Donepezil 121679-13-8, Naratriptan 122320-73-4, Rosiglitazone
 123948-87-8, Topotecan 127779-20-8, Saquinavir 129497-78-5,
 Verteporfin 131918-61-1, Paricalcitol 133040-01-4, Eprosartan
 134523-00-5, Atorvastatin 135062-02-1, Repaglinide 137862-53-4,
 Valsartan 138402-11-6, Irbesartan 139264-17-8, Zolmitriptan
 139481-59-7, Candesartan 144034-80-0, Rizatriptan 144494-65-5,
 Tirofiban 144701-48-4, Telmisartan 145599-86-6, Cerivastatin
 145941-26-0, 2-178-Interleukin 11 (human clone pXM/IL-11) 147059-72-1,
 Trovafloxacin 153559-49-0, Targretin 154598-52-4, Efavirenz
 155213-67-5, Ritonavir 158747-02-5, Frovatriptan 158966-92-8,
 Montelukast 159989-64-7, Nelfinavir 162011-90-7, Rofecoxib
 169590-42-5, Celecoxib 171599-83-0, Sildenafil citrate 691397-13-4,
 Pluronic F 127
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (inhalatable compns. of lipophilic drugs having enhanced bioavailability)
 IT 303-98-0, Coenzyme Q 10
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (inhalatable compns. of lipophilic drugs having enhanced bioavailability)
 RN 303-98-0 ZCAPLUS
 CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-
 3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-
 tetraccontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 7 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2009:470777 ZCPLUS Full-text
 DOCUMENT NUMBER: 150:497155
 TITLE: Method and apparatus for obtaining ultrafine lipid, lipid-soluble substance or macromolecular particle by atomizing supercritical carbon dioxide saturated solution
 INVENTOR(S): Li, Jun; Hong, Wei; Su, Yuzhong; Wang, Hongtao
 PATENT ASSIGNEE(S): Xiamen University, Peop. Rep. China
 SOURCE: Faming Zhanli Shenqing Gongkai Shuomingshu, 10pp.
 CODEN: CNXXEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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CN 101406818	A	20090415	CN 2008-10072107	20081112
PRIORITY APPLN. INFO.:			CN 2008-10072107	20081112
AB The title apparatus comprises a carbon dioxide storage tank, a high pressure atomizing fluid storage tank, a condensing tank, a buffer tank, a high pressure mixing tank, a collecting chamber, a filter, a normal pressure material tank, two pressure-controlled pumps or compressors, a high pressure circulating pump, a high pressure liquid pump, a compressor, a valve, a pressure meter, and a temperature meter. The method comprises (1) melting a material to be treated, placing into the mixing tank, introducing carbon				

dioxide into the mixing tank, and heating the mixing tank until the carbon dioxide reaches supercrit. state, and (2) starting the circulating pump to pump the material in the mixing tank from the bottom to the top for circulation until a carbon dioxide saturated solution is formed in the mixing tank, delivering into one passage of a coaxial dual-passage spray nozzle, adding atomizing fluid into the other passage to atomize the carbon dioxide saturated solution, and collecting solidified particles in the collecting chamber.

CC 48-3 (Unit Operations and Processes)

Section cross-reference(s): 49

IT 303-98-0, Coenzyme Q10 544-63-8, Myristic acid, uses

25322-68-3, Polyethylene glycol

RL: TEM (Technical or engineered material use); USES (Uses)
(method and apparatus for obtaining ultrafine lipid, lipid-soluble substance or

macromol. particle by atomizing supercrit. carbon dioxide saturated solution)

IT 303-98-0, Coenzyme Q10

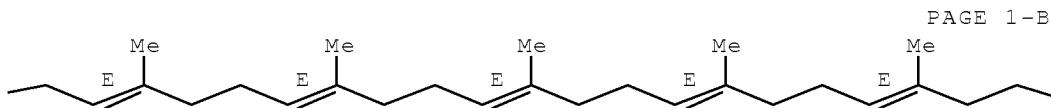
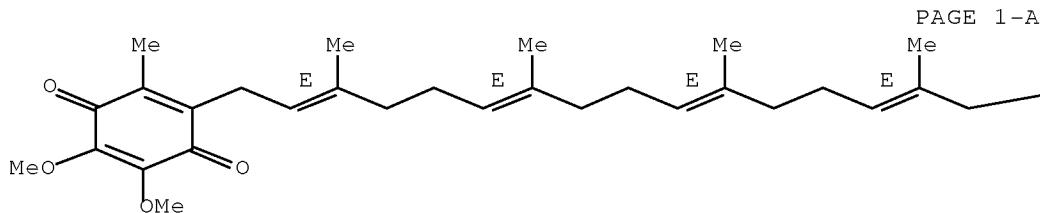
RL: TEM (Technical or engineered material use); USES (Uses)
(method and apparatus for obtaining ultrafine lipid, lipid-soluble substance or

macromol. particle by atomizing supercrit. carbon dioxide saturated solution)

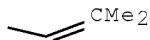
RN 303-98-0 ZCPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



L87 ANSWER 8 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2008:1156621 ZCPLUS Full-text
 DOCUMENT NUMBER: 149:409737
 TITLE: Topical formulations comprising lipophilic bioactive agents having enhanced bioavailability
 INVENTOR(S): McCook, John Patrick; Narain, Niven Rajin; Persaud, Indushekhar
 PATENT ASSIGNEE(S): Pathfinder Management, Inc., USA
 SOURCE: PCT Int. Appl., 68pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008116135	A2	20080925	WO 2008-US57786	20080321
WO 2008116135	A3	20081224		
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
AU 2008228764	A1	20080925	AU 2008-228764	20080321
CA 2680825	A1	20080925	CA 2008-2680825	20080321
US 20080233183	A1	20080925	US 2008-52825	20080321
EP 2136787	A2	20091230	EP 2008-732635	20080321
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR				
NO 2009003032	A	20091022	NO 2009-3032	20090921
MX 2009010170	A	20091126	MX 2009-10170	20090922
PRIORITY APPLN. INFO.:			US 2007-919554P	P 20070322
			WO 2008-US57786	W 20080321

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present disclosure provides compns. suitable for delivering lipophilic bioactive agents. The compns. may be utilized to treat numerous diseases and conditions that would benefit from the application of a lipophilic bioactive agent. Thus, a cream contained Polysorbate-80 25.000, ubidecarenone 21.000, propylene glycol 10.000, phenoxyethanol 0.500, water 35.500, and lecithin 8.000%.

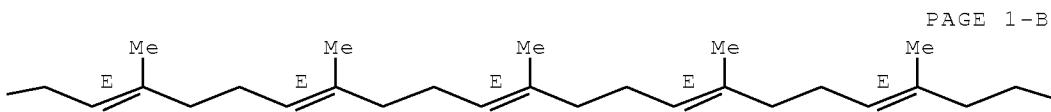
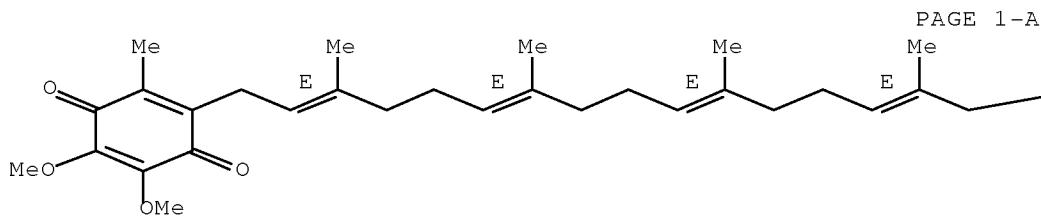
CC 63-6 (Pharmaceuticals)
 IT Absorbents
 Analgesics
 Anthelmintics
 Anti-inflammatory agents
 Antianginal agents
 Antiarrhythmics
 Antibacterial agents
 Anticoagulants
 Anticonvulsants

Antidepressants
Antidiabetic agents
Antifoaming agents
Antihistamines
Antihypertensives
Antimalarials
Antimicrobial agents
Antimigraine agents
Antiobesity agents
Antiosteoporotic agents
Antioxidants
Antiparkinsonian agents
Antipsychotics
Antithyroid agents
Antitumor agents
Antiviral agents
Anxiolytics
Buffers
Carcinoma
Chelating agents
Cognition enhancers
Cyclooxygenase 2 inhibitors
Diuretics
Emulsifying agents
Fungicides
Gastrointestinal agents
Human
Humectants
Hypnotics and Sedatives
Immunosuppressants
Inotropics
Leukemia
Leukotriene antagonists
Lymphoma
Melanoma
Muscarinic antagonists
Muscle relaxants
Neoplasm
Nervous system stimulants
Nutrition, animal
Permeation enhancers
Pharmaceutical creams
Pharmaceutical liposomes
Pigments, nonbiological
Protozoacides
Sarcoma
Skin emollients
Solubilizers
Solvents
Stabilizing agents
Surfactants
Thickening agents
Tranquilizers
 β -Adrenoceptor antagonists
(topical formulations comprising lipophilic bioactive agents having enhanced bioavailability)
IT 50-14-6, Ergocalciferol 50-21-5, 2-Hydroxypropionic acid, biological studies 50-21-5D, Lactic acid, derivs. 50-24-8, Prednisolone 50-28-2, Estradiol, biological studies 51-48-9, L-Thyroxine, biological studies 52-01-7, Spironolactone 55-98-1, Busulphan 56-81-5,

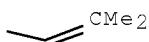
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 9004-54-0D, Dextran, alkoxylated 9004-74-4, Methoxy polyethylene glycol
 9004-81-3, Polyethylene glycol laurate 9004-96-0, Polyoxyethylene oleate
 9004-99-3, Polyethylene glycol stearate 9005-08-7, Polyethylene glycol
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 10238-21-8, Glibenclamide 10540-29-1, Tamoxifen 11099-07-3, Glyceryl
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 Vitamin K 12173-47-6, Hectorite 13463-67-7, Titanium dioxide,
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 Calcifediol 20594-83-6, Nalbuphine 20830-75-5, Digoxin 21256-18-8,
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 Probucol 25231-21-4, Polyoxypropylene stearyl ether 25322-68-3D,
 esters or ethers 25523-97-1, Dexchlorpheniramine 25812-30-0,
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 51481-61-9, Cimetidine 53123-88-9, Sirolimus 53179-11-6, Loperamide
 53230-10-7, Mefloquine 54965-21-8, Albendazole 55079-83-9, Acitretin
 55142-85-3, Ticlopidine 58251-46-0, RitaPRO 165 59227-89-3,
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 Rifapentine 61869-08-7, Paroxetine 62013-04-1, Dirithromycin
 62356-64-3 63590-64-7, Terazosin 63612-50-0, Nilutamide 63675-72-9,
 Nisoldipine 65271-80-9, Mitoxantrone 65277-42-1, Ketoconazole
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (topical formulations comprising lipophilic bioactive agents having
 enhanced bioavailability)
 IT 303-98-0, Coenzyme Q10
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (topical formulations comprising lipophilic bioactive agents having
 enhanced bioavailability)
 RN 303-98-0 ZCAPLUS
 CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-
 3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-
 tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



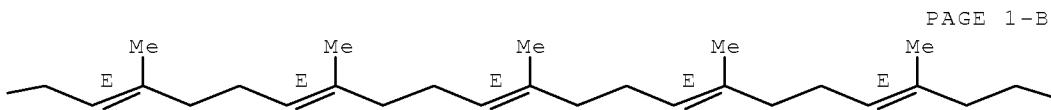
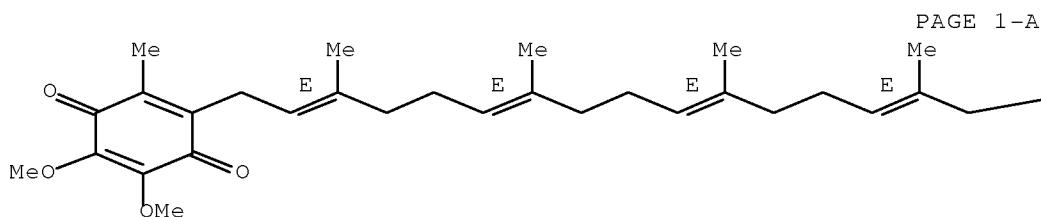
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L87 ANSWER 9 OF 37 ZCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2008:1095572 ZCAPLUS [Full-text](#)
 DOCUMENT NUMBER: 150:279445
 TITLE: Effects of coq10 supplementation and incremental load training on the activities of skeletal muscle mitochondrial respiratory chain complexes of rats with an exhaust exercise
 AUTHOR(S): Li, Jie; Wang, Yuxia; Xing, Liangmei; Zhang, Yaobin
 CORPORATE SOURCE: College of Physical Education, Northwest Normal University, Lanzhou, 730070, Peop. Rep. China
 SOURCE: Zhongguo Yundong Yixue Zazhi (2008), 27(4), 475-477
 CODEN: ZYYZAS; ISSN: 1000-6710
 PUBLISHER: Zhongguo Tiyu Baoye Zongshe
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 AB The effects of CoQ10 supplementation and incremental load training on the activities of skeletal muscle mitochondrial respiratory chain complexes I-III of rats with an exhaust exercise were studied. 36 Male Wistar rats (2-mo-old) were divided into 4 groups ($n = 9$): control group (NC), CoQ10 supplementation group (QC), training group , and CoQ10 supplementation + training group (QE). Rats were fed and trained for 7 wk. Rats in QC group and QE group were supplemented CoQ10 (2 mg/100 g body mass per day). Rats only in NE group and QE group were performed incremental load treadmill training. Rats in each group were performed an exhaust exercise and then sacrificed, and the activities of mitochondrial respiratory chain complexes were detected. The activity of complex I in QC group and QE group was significantly lower than that in NC group ($P < 0.05$, $P < 0.01$), and that in QE group was significantly

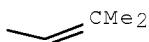
lower than that in NE group ($P < 0.05$). The activity of complex II in QC group was significantly higher than that in NC group ($P < 0.01$), that in QE group was significantly lower than that in QC group ($P < 0.01$), and that in QE group was significantly higher than that in NE group ($P < 0.05$). The activity of complex III in QC group and NE group was significantly higher than that in NC group ($P < 0.01$). The results showed that single CoQ10 supplementation and incremental load training can increase instant function of skeletal muscle mitochondrial respiratory chain, preferably single CoQ10 supplementation, but there was no synergistic effect between both.

CC 13-6 (Mammalian Biochemistry)
IT 303-98-0, Coenzyme Q10 9028-04-0, NADH-CoQ reductase
9028-11-9, Succinate-CoQ reductase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(effects of coq10 supplementation and incremental load training on the
activities of skeletal muscle mitochondrial respiratory chain complexes
of rats with an exhaust exercise)
IT 303-98-0, Coenzyme Q10
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(effects of coq10 supplementation and incremental load training on the
activities of skeletal muscle mitochondrial respiratory chain complexes
of rats with an exhaust exercise)
RN 303-98-0 ZCAPLUS
CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-
3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-
tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



10/597378

ACCESSION NUMBER: 2009:1376098 ZCPLUS Full-text
DOCUMENT NUMBER: 152:117420
TITLE: Screening of coenzyme Q10 producing marine yeast and optimization of its culture conditions
AUTHOR(S): Li, Junfeng; Yao, Shumin; Li, Hongfang
CORPORATE SOURCE: Department of Bioengineering and Biotechnology, Qingdao University of Science and Technology, Qingdao, Shandong Province, 266043, Peop. Rep. China
SOURCE: Shipin Kexue (Beijing, China) (2008), 29(12), 426-430
PUBLISHER: Zhongguo Shipin Zazhishe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese

AB Eleven coenzyme Q10 producing strains were isolated from 50 marine yeasts preliminarily. A high-producing strain, FH-8 was obtained through rescreening from those 11 yeasts. The fermentation conditions of CoQ10 by FH-08 were optimized. The optimal fermentation conditions were as following: carbon source of glucose 3%, nitrogen source of yeast extract 2%, initial pH 6.5, inoculum size 4%, filled volume of medium 50 mL/300 mL, temperature 30°C and rotation speed 200 r/min. Under these fermentation conditions, the biomass reached 2.34 g/200 mL, and the CoQ10 concentration in broth reaches 28.6 mg/L.

CC 16-2 (Fermentation and Bioindustrial Chemistry)

IT 303-98-0P, Coenzyme Q10

RL: BMF (Bioindustrial manufacture); BIOL (Biological study); PREP (Preparation)

(screening of coenzyme Q10 producing marine yeast and optimization of its culture conditions)

IT 303-98-0P, Coenzyme Q10

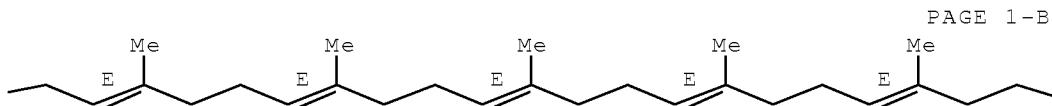
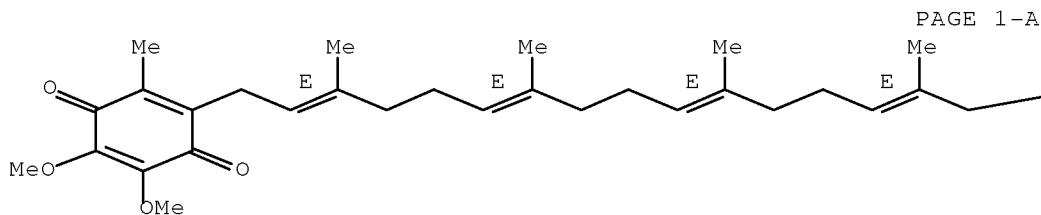
RL: BMF (Bioindustrial manufacture); BIOL (Biological study); PREP (Preparation)

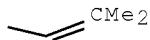
(screening of coenzyme Q10 producing marine yeast and optimization of its culture conditions)

RN 303-98-0 ZCPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

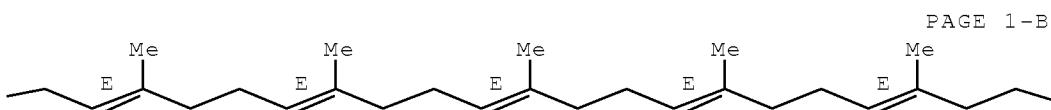
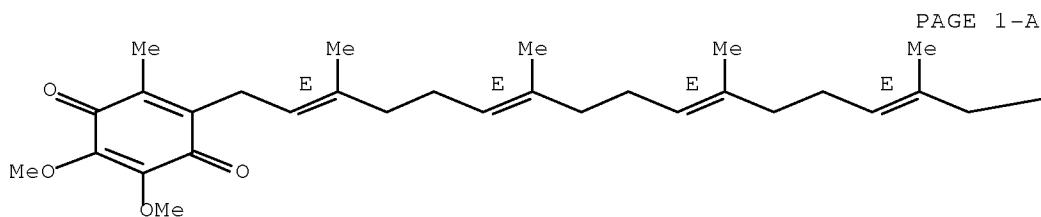
Double bond geometry as shown.



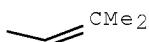


L87 ANSWER 11 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2009:499251 ZCPLUS Full-text
 DOCUMENT NUMBER: 151:196411
 TITLE: Promotion of coenzyme Q10 productivity through tolerating high concentration of precursor and structure analogy
 AUTHOR(S): Li, Jiayang; Ding, Yan; Zhou, Pei
 CORPORATE SOURCE: Department of Biosynthesis Medicinal Chemistry, School of Pharmacy, Fudan University, Shanghai, 200032, Peop. Rep. China
 SOURCE: Fudan Xuebao, Yixueban (2008), 35(3), 393-395, 400
 CODEN: FXYUAO; ISSN: 1672-8467
 PUBLISHER: Fudan Xuebao, Yixueban Bianji Weiyuanhui
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 AB The coenzyme Q10 productivity of *Candida tropicalis* was promoted. *Candida tropicalis* was used as the starting strain and subjected to UV-radiation. On the basis of feedback regulation mechanism for coenzyme Q10 synthesis pathway, a high productivity coenzyme Q10 mutant screening method was set up. Mutants were specifically screened with high concentration coenzyme Q10 precursor p-hydroxybenzoic acid and benzoic acid. The final coenzyme Q10 yield of the mutant reached 120 µg/mL, which was 2.84 times higher than that of the original strain. The high concentration biosynthetic precursor can promote the coenzyme Q10 productivity.
 CC 16-5 (Fermentation and Bioindustrial Chemistry)
 Section cross-reference(s): 7, 10
 IT 303-98-0P, Coenzyme Q10
 RL: BMF (Bioindustrial manufacture); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation)
 (promotion of coenzyme Q10 productivity through screening of UV radiation-induced *Candida tropicalis* mutant)
 IT 303-98-0P, Coenzyme Q10
 RL: BMF (Bioindustrial manufacture); BSU (Biological study, unclassified); BIOL (Biological study); PREP (Preparation)
 (promotion of coenzyme Q10 productivity through screening of UV radiation-induced *Candida tropicalis* mutant)
 RN 303-98-0 ZCPLUS
 CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



L87 ANSWER 12 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2007:166267 ZCPLUS Full-text
 DOCUMENT NUMBER: 146:254492
 TITLE: Nitrogen-assisted method and device for preparing microspheres
 INVENTOR(S): Li, Jun; Su, Yuzhong; Wang, Hongtao
 PATENT ASSIGNEE(S): Xiamen University, Peop. Rep. China
 SOURCE: Faming Zhanli Shenqing Gongkai Shuomingshu, 10pp.
 CODEN: CNXXEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1907553	A	20070207	CN 2006-10036589	20060720
CN 100478062	C	20090415		

PRIORITY APPLN. INFO.: CN 2006-10036589 20060720
 AB The title method comprises pumping raw material to a high-pressure system, sending to a nozzle, atomizing with high-pressure nitrogen gas, and curing atomized particles in a particle collecting chamber. The title device comprises gas conveying part, liquid conveying part, particle forming/collecting part, and control/display part. By adopting supercrit. nitrogen gas and coaxial two-channel nozzle, the invention can conveniently treat liquid raw material with simplified operation and control to form uniform microspheres.

CC 48-4 (Unit Operations and Processes)
 IT 303-98-0, Coenzyme Q10

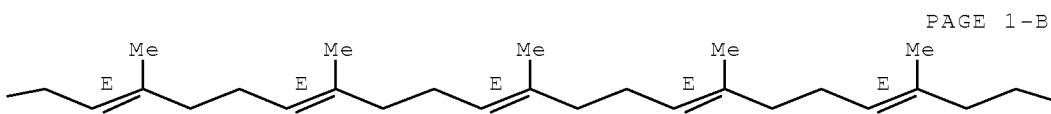
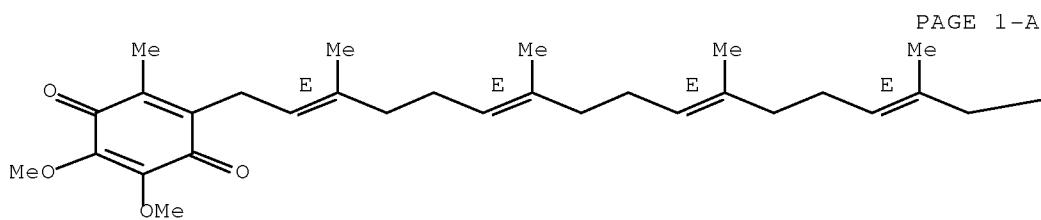
10/597378

IT RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(nitrogen-assisted method and device for preparation of microspheres)
303-98-0, Coenzyme Q10

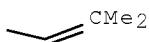
RN RL: PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
(nitrogen-assisted method and device for preparation of microspheres)
303-98-0 ZCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-
3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-
tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



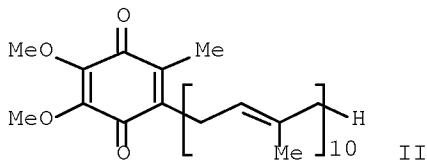
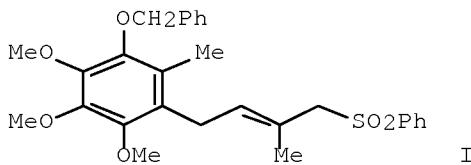
PAGE 1-C



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

L87 ANSWER 13 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2008:293049 ZCPLUS Full-text
DOCUMENT NUMBER: 150:144172
TITLE: Friedel-Crafts allylation of
2-(benzyloxy)-3,4,5-trimethoxytoluene catalyzed by a
metal trifluoromethanesulfonate salt in synthesis of
coenzyme Q10
AUTHOR(S): Zheng, Yun-Feng; Lin, Jing-Du; Li, Cheng-Ping; Li,
Jing-Hua
CORPORATE SOURCE: College of Pharmaceutical Sciences, Zhejiang
University of Technology, 310032, Peop. Rep. China
SOURCE: Journal of Chemical Research (2007), (12), 686-688
CODEN: JCROA4

PUBLISHER: Science Reviews
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 OTHER SOURCE(S): CASREACT 150:144172
 GI



AB In the presence of a catalytic amount of scandium triflate, 2-(benzyloxy)-3,4,5-trimethoxytoluene reacted with allylic derivs., giving the key intermediate (E)-I, which was used for preparing coenzyme Q10 (II) in moderate to high yields.

CC 26-8 (Biomolecules and Their Synthetic Analogs)
 Section cross-reference(s): 25

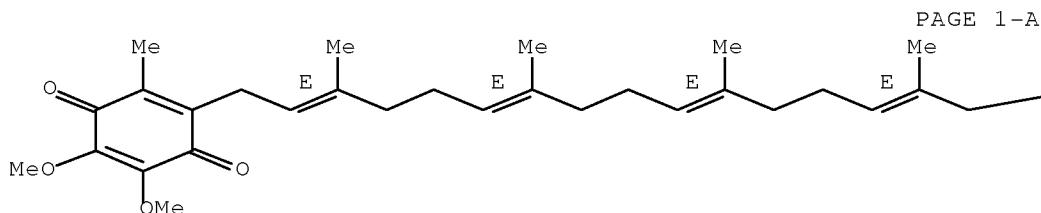
IT 303-98-0P, Coenzyme Q10
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (Friedel-Crafts allylation of 2-(benzyloxy)-3,4,5-trimethoxytoluene catalyzed by scandium triflate in preparation of coenzyme Q10)

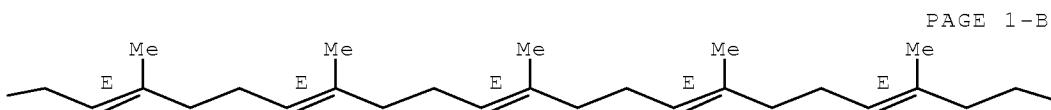
IT 303-98-0P, Coenzyme Q10
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (Friedel-Crafts allylation of 2-(benzyloxy)-3,4,5-trimethoxytoluene catalyzed by scandium triflate in preparation of coenzyme Q10)

RN 303-98-0 ZCPLUS

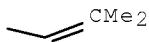
CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.





PAGE 1-C



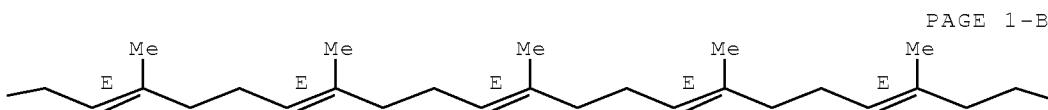
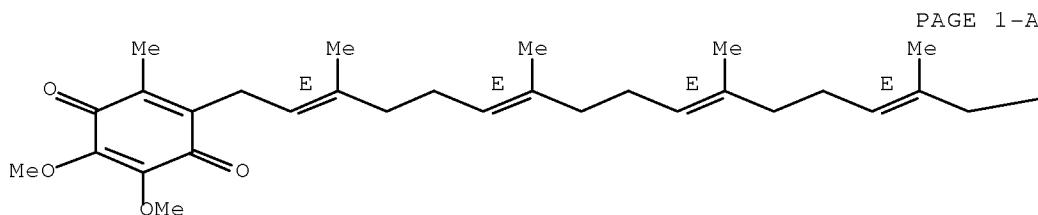
REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 14 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2008:482201 ZCPLUS Full-text
 DOCUMENT NUMBER: 149:124950
 TITLE: Protecting myocardium by inhibiting activation of nuclear factor kappa B in open heart surgery
 AUTHOR(S): Wang, Yun; Yi, Dinghua; Wan, Ronghua; Gu, Jiwei; Li, Junpeng
 CORPORATE SOURCE: Department of Cardiothoracic Surgery, Ningxia Medical College Hospital, Yinchuan, Ningxia Province, 750004, Peop. Rep. China
 SOURCE: Xi'an Jiaotong Daxue Xuebao, Yixueban (2007), 28(1), 43-46
 CODEN: XJDXAS; ISSN: 1671-8259
 PUBLISHER: Xi'an Jiaotong Daxue Xuebao, Yixueban Bianjibu
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese
 AB The relationship of the activation of nuclear factor kappa B (NF- κ B) with myocardial neutrophil infiltration and injury in human open heart surgery was investigated, and the inhibiting effect on the activation of NF- κ B and protecting effect on myocardium of the Coenzyme Q10, a scavenger of oxygen free radicals, were observed. Forty-seven adult patients undergoing open heart surgery were randomly divided into two groups, the control group and the treatment group. Coenzyme Q10 tablets were given to the treatment group 5 days before operation. Biopsy of right atrium for myocardial pathol., activated NF- κ B detection and ultrastructure observation were done prior to cardiopulmonary bypass, 45 min of ischemia and 45 min of reperfusion. The dynamic indexes, vasomotor drug dosage and outcomes were observed postoperatively. Upon 45 min of ischemia and 45 min of reperfusion, in control group there were neutrophil accumulation and adhesion of vascular endothelium, ultrastructural damages, and pos. expression of NF- κ B both in nuclei and cytoplasm, and in myocardium. In treatment group, there were only mild neutrophil infiltration and ultrastructural damages, and weak pos. expression of NF- κ B both in nuclei and cytoplasm. However, the dynamic indexes, vasomotor drug dosage and outcomes of two groups were not significantly different. NF- κ B plays an important role in pathophysiol. process of myocardial ischemia and reperfusion in open heart surgery. Coenzyme Q10 has obvious inhibiting effect on activation of NF- κ B and protecting effect on myocardium.

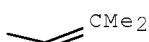
10/597378

CC 14-2 (Mammalian Pathological Biochemistry)
IT 303-98-0, Coenzyme Q10
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(protecting myocardium by inhibiting activation of nuclear factor kappa
B in open heart surgery)
IT 303-98-0, Coenzyme Q10
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(protecting myocardium by inhibiting activation of nuclear factor kappa
B in open heart surgery)
RN 303-98-0 ZCPLUS
CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-
3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-
tetraccontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



L87 ANSWER 15 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2009:67033 ZCPLUS Full-text
DOCUMENT NUMBER: 151:6847
TITLE: Breeding of the analogue-resistant strains for high
production of coenzyme Q10
AUTHOR(S): Qi, Wei; Li, Jing; Li, Jian; Wang, Jianling; Du,
Lianxiang
CORPORATE SOURCE: Tianjin Key Laboratory of Industrial Microbiology,
College of Biotechnology, Tianjin University of
Science and Technology, Tianjin, 300457, Peop. Rep.
China
SOURCE: Gongye Weishengwu (2007), 37(6), 12-15
CODEN: GOWEEK; ISSN: 1001-6678

PUBLISHER: Quanguo Gongye Weishengwu Xinxi Zhongxin
 DOCUMENT TYPE: Journal
 LANGUAGE: Chinese

AB Agrobacterium sp. TLY-4 was treated by NTG with the death-rate of 70%. Two vitamin K3-resistant mutants R-122 and R-015 with high production of Co Q10 were obtained. The CoQ10 yield of R-122 and R-015 reached 57.3 mg/L and 59.9 mg/L in shaking flask for 72 h. They were 35.7% and 41.6% higher than that of the original strain resp. The mutants R-122 and R-015 showed high genetic stability in subculture expts. The problem of the insol. of vitamin K3 in the medium was solved by adding N, N-dimethylformamide (DMF) and Tween-80. And the minimal inhibitory concentration of vitamin K3 in ager plat was 0.15 mg/mL.

CC 16-2 (Fermentation and Bioindustrial Chemistry)

IT 303-98-0P, Coenzyme Q10

RL: BMF (Bioindustrial manufacture); BIOL (Biological study); PREP (Preparation)

(increase in fermentation of coenzyme Q10 by mutagenesis of Agrobacterium)

IT 303-98-0P, Coenzyme Q10

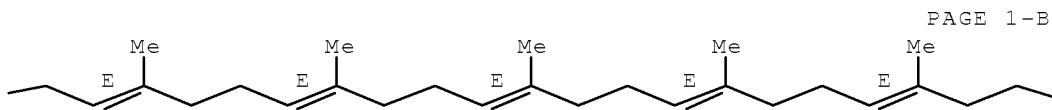
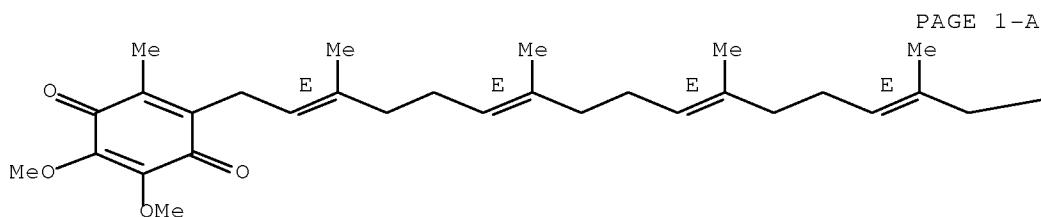
RL: BMF (Bioindustrial manufacture); BIOL (Biological study); PREP (Preparation)

(increase in fermentation of coenzyme Q10 by mutagenesis of Agrobacterium)

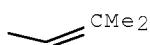
RN 303-98-0 ZCPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.

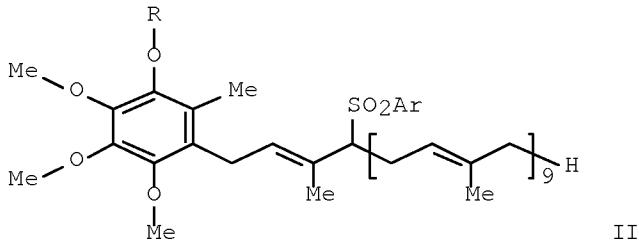
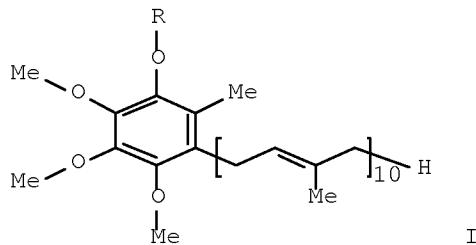


PAGE 1-C



ACCESSION NUMBER: 2006:649839 ZCPLUS Full-text
 DOCUMENT NUMBER: 145:167431
 TITLE: Synthesis of coenzyme Q10
 INVENTOR(S): Li, Jinghua; Zheng, Yunfeng; Shen, Huafeng
 PATENT ASSIGNEE(S): Zhejiang University of Technology, Peop. Rep. China
 SOURCE: Faming Zhanli Shenqing Gongkai Shuomingshu, 22 pp.
 CODEN: CNXXEV
 DOCUMENT TYPE: Patent
 LANGUAGE: Chinese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1793100	A	20060628	CN 2005-10062381	20051230
PRIORITY APPLN. INFO.:			CN 2005-10062381	20051230
OTHER SOURCE(S):	CASREACT 145:167431; MARPAT 145:167431			
GI				



AB The title preparation includes alkali metal reduction of 2,3,4-trimethoxy-5-R-oxy-6-methylphenyl polyisoprene (formula I, R = diphenylmethyl or benzyl or benzyl substituted with C1-6 hydrocarbyl or methoxy or ethoxy) at -80 to 40° in organic solvent (C1-6 alc., liquid ammonia, methylamine, dimethylamine, ethylamine, diethylamine, or their mixture) to generate 5-hydroxy-2,3,4-trimethoxy-6-methylphenyl polyisoprene, then oxidation with ferric salt to generate the coenzyme Q10, wherein the compound I was obtained by reduction/desulfonation 2-(4-solanesyl-4-arylsulfonyl-3-methyl-but-2-enyl)-3,4,5-trimethoxy-6-R-oxytoluene II with lithium triethylborohydride in the presence of Pd(DPPP)C12. The method has the advantage of high product yield and can be industrialized at lower cost.

CC 30-40 (Terpenes and Terpenoids)

IT 303-98-0P, Coenzyme Q10

RL: SPN (Synthetic preparation); PREP (Preparation)
 (synthesis of coenzyme Q10 via reduction/desulfonation and oxidation)

10/597378

IT 303-98-0P, Coenzyme Q10

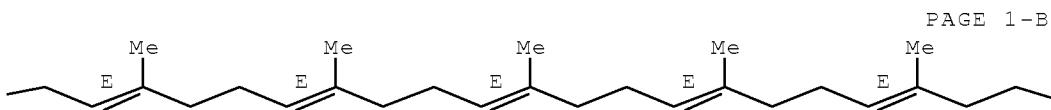
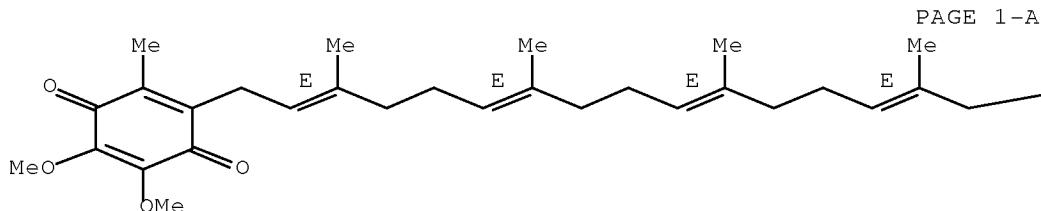
RL: SPN (Synthetic preparation); PREP (Preparation)

(synthesis of coenzyme Q10 via reduction/desulfonation and oxidation)

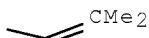
RN 303-98-0 ZCPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-
3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-
tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



L87 ANSWER 17 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2006:1033182 ZCPLUS Full-text

DOCUMENT NUMBER: 146:323916

TITLE: Evaluation of uncertainty for determination the
content of coenzyme Q10 capsules by HPLC.

AUTHOR(S): Lin, Huijing; Li, Jie

CORPORATE SOURCE: Dongguan Institute for Drug Control, Dongguan,
GuangDong, 523109, Peop. Rep. China

SOURCE: Zhongguo Yaoshi (Wuhan, China) (2006), 9(6), 498-500
CODEN: ZYWCAH; ISSN: 1008-049X

PUBLISHER: Yaowu Liuxingbingxue Zazhishe

DOCUMENT TYPE: Journal

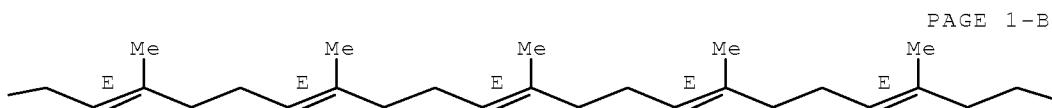
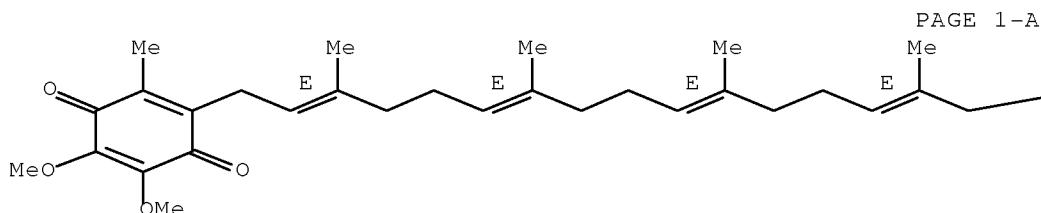
LANGUAGE: Chinese

AB A method was established for evaluation of uncertainty in content assaying of
coenzyme Q10 capsules by HPLC. ODS was employed as stationary phase, MeOH-
EtOH (1:1) was used as mobile phase and the detection wavelength was set to
275 nm. Uncertainty in each ponderance were analyzed and put forward combined
standard uncertainty results of the method. It was concluded that the
measures result is controllable under constant instrument environment.

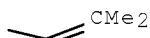
10/597378

CC 64-3 (Pharmaceutical Analysis)
IT 303-98-0, Coenzyme Q10
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(uncertainty evaluation for content assaying of coenzyme Q10 capsules by HPLC)
IT 303-98-0, Coenzyme Q10
RL: ANT (Analyte); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(uncertainty evaluation for content assaying of coenzyme Q10 capsules by HPLC)
RN 303-98-0 ZCPLUS
CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



L87 ANSWER 18 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2006:199505 ZCPLUS Full-text
DOCUMENT NUMBER: 144:496293
TITLE: Binary solid-liquid-gas equilibrium of the tripalmitin/CO₂ and ubiquinone/CO₂ systems
AUTHOR(S): Li, Jun; Rodrigues, Miguel; Paiva, Alexandre; Matos, Henrique A.; Gomes de Azevedo, Edmundo
CORPORATE SOURCE: Department of Chemical Engineering, Instituto Superior Tecnico, Lisbon, 1049-001, Port.
SOURCE: Fluid Phase Equilibria (2006), 241(1-2), 196-204
CODEN: FPEQDT; ISSN: 0378-3812

PUBLISHER: Elsevier B.V.
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB A conventional method was used to measure the m.ps. of the natural lipid tripalmitin and of the coenzyme ubiquinone (coQ10) under high pressure carbon dioxide. The pressure-temperature behavior of the binary three-phase solid-liquid-gas (SLG) equilibrium for these and test systems, namely naphthalene and biphenyl with carbon dioxide, ethylene and ethane, were investigated using the Peng-Robinson equation of state (PR-EoS) with the van der Waals one fluid (vdw-1) mixing rules and with the NRTL equation to calculate the solute activity in the liquid phase. When the interaction parameter in the vdw-1 mixing rules could be determined by the PR-EoS through the correlation of the solid-fluid phase equilibrium data, the two NRTL parameters were used as adjustable parameters. The results showed that fairly good correlations could be achieved for the exptl. pressure-temperature data of all the asym. systems studied here, indicating that the NRTL parameters are crucial for describing the pressure-temperature behavior but have little effect on the phase compns. at the SLG equilibrium

CC 68-1 (Phase Equilibria, Chemical Equilibria, and Solutions)

IT 124-38-9, Carbon dioxide, properties 303-98-0, CoQ10

555-44-2, Glyceryl tripalmitate

RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)

(solid-liquid-gas equilibrium in carbon dioxide binary mixts. with glyceryl tripalmitate and coQ10)

IT 303-98-0, CoQ10

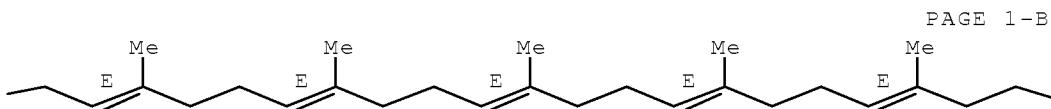
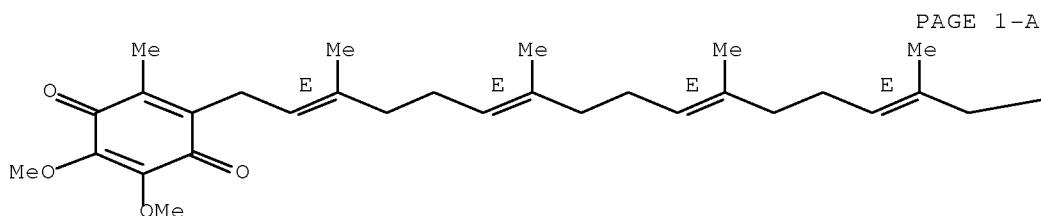
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP (Physical process); PROC (Process)

(solid-liquid-gas equilibrium in carbon dioxide binary mixts. with glyceryl tripalmitate and coQ10)

RN 303-98-0 ZCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



CMe2

OS.CITING REF COUNT: 6 THERE ARE 6 CAPLUS RECORDS THAT CITE THIS RECORD
 (6 CITINGS)
 REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

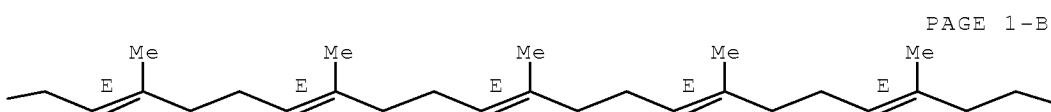
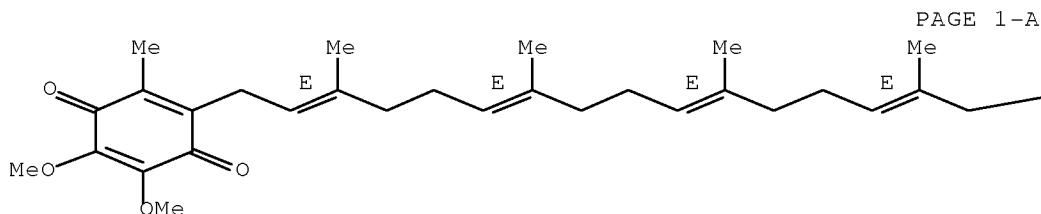
L87 ANSWER 19 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1998:108411 ZCPLUS Full-text
 DOCUMENT NUMBER: 128:99936
 ORIGINAL REFERENCE NO.: 128:19505a,19508a
 TITLE: Kinetic Phases in the Electron Transfer from P+QA-QB
 to P+QAQB- and the Associated Processes in Rhodobacter
 sphaeroides R-26 Reaction Centers
 AUTHOR(S): Li, Jiali; Gilroy, Dan; Tiede, David M.; Gunner, M. R.
 CORPORATE SOURCE: Department of Physics, City College of New York, New
 York, NY, 10031, USA
 SOURCE: Biochemistry (1998), 37(9), 2818-2829
 CODEN: BICHAW; ISSN: 0006-2960
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Electron transfer from P+QA-QB to form P+QAQB- was measured in Rhodobacter
 sphaeroides R-26 reaction centers (RCs) where the native primary quinone,
 ubiquinone-10 (UQA), was replaced by 2-methyl-3-phytyl-1,4-naphthoquinone
 (MQA). The native secondary quinone, UQ-10, was retained as UQB. The
 difference spectrum of the semiquinone MQA- minus UQB- absorption is very
 similar to that of MQ- minus UQ- in solution (398-480 nm). Thus, the
 absorption change provides a direct monitor of the electron transfer from MQA-
 to UQB. In contrast, when both QA and QB are UQ-10 the spectral difference
 between UQA- and UQB- arises from electrochromic responses of RC chromophores.
 Three kinetic processes are seen in the near UV (390-480 nm) and near-IR (740-
 820 nm). Anal. of the time-correlated spectra support the conclusion that the
 changes at $\tau_1 \approx 3 \mu\text{s}$ are mostly due to electron transfer, electron transfer
 and charge compensation are mixed in $\tau_2 \approx 80 \mu\text{s}$, while little or no electron
 transfer occurs at 200-600 μs (τ_3) in MQAUQB RCs. The 80- μs rate has been
 previously observed, while the fast component has not. The fast phase
 represents 60% of the electron-transfer reaction (398 nm). The activation
 energy for electron transfer is $\Delta G \approx 3.5 \text{ kcal/mol}$ for both τ_1 and τ_2 between 0
 and 30°C. In isolated RCs with UQA, if there is any fast component, it
 appears to be faster and less important than in the MQA reconstituted RCs.
 CC 11-6 (Plant Biochemistry)
 Section cross-reference(s): 10
 IT 84-80-0 303-98-0, Ubiquinone-10
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
 (Biological study); PROC (Process)
 (kinetic phases in electron transfer from P+QA-QB to P+QAQB- and the
 associated processes in Rhodobacter sphaeroides R-26 reaction centers)
 IT 303-98-0, Ubiquinone-10
 RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL
 (Biological study); PROC (Process)
 (kinetic phases in electron transfer from P+QA-QB to P+QAQB- and the
 associated processes in Rhodobacter sphaeroides R-26 reaction centers)

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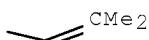
RN 303-98-0 ZCPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-
3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-
tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



OS.CITING REF COUNT: 87 THERE ARE 87 CAPLUS RECORDS THAT CITE THIS
RECORD (87 CITINGS)
REFERENCE COUNT: 82 THERE ARE 82 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L87 ANSWER 20 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1997:186974 ZCPLUS Full-text
DOCUMENT NUMBER: 126:220276
ORIGINAL REFERENCE NO.: 126:42439a, 42442a
TITLE: N-Aryl-3,3,3- trifluoro-2-hydroxy-2-
methylpropanamides: KATP Potassium Channel Openers.
Modifications on the Western Region. [Erratum to
document cited in CA126:370]
AUTHOR(S): Ohnmacht, Cyrus J.; Russell, Keith; Empfield, James
R.; Frank, Cathy A.; Gibson, Keith H.; Mayhugh, Daniel
R.; McLaren, Frances M.; Shapiro, Howard S.; Brown,
Frederick J.; Trainor, Diane A.; Ceccarelli,
Christopher; Lin, Margaret M.; Masek, Brian B.; Forst,
Janet M.; Harris, Robert J.; Hulsizer, James M.;
Lewis, Joseph J.; Silverman, Stuart M.; Smith, Reed
W.; Warwick, Paul J.; Kau, Sen T.; Chun, Alexa L.;
Grant, Thomas L.; Howe, Burton B.; Li, Jack R.;
Trivedi, Shephali; Halterman, Tracy J.; Yochim,

Christopher; Dyroff, Martin C.; Kirkland, M.; Neilson,
 Kathleen L.
 CORPORATE SOURCE: Department of Medicinal Chemistry, Zeneca
 Pharmaceuticals, Wilmington, DE, 19897, USA
 SOURCE: Journal of Medicinal Chemistry (1997), 40(6), 1048
 CODEN: JMCMAR; ISSN: 0022-2623
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB The errors were not reflected in the abstract or the index entries.
 CC 1-3 (Pharmacology)
 Section cross-reference(s): 25

L87 ANSWER 21 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1995:756145 ZCPLUS Full-text
 DOCUMENT NUMBER: 123:165777
 ORIGINAL REFERENCE NO.: 123:29483a,29486a
 TITLE: Calcium dependent K-channels in guinea pig and human urinary bladder
 AUTHOR(S): Trivedi, S.; Potter-Lee, L.; Li, J. X.; Yasay, G. D.; Russell, K.; Ohnmacht, C. J.; Empfield, J. R.; Trainor, D. A.; Kau, S. T.
 CORPORATE SOURCE: Dep. Pharmacol. Med. Chem., Zeneca Inc., Wilmington, DE, 19897, USA
 SOURCE: Biochemical and Biophysical Research Communications (1995), 213(2), 404-9
 CODEN: BBRCA9; ISSN: 0006-291X
 PUBLISHER: Academic
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB This study provides evidence for the presence of large conductance Ca²⁺-dependent K-channels in guinea pig and human urinary bladder smooth muscle. A23187, a Ca²⁺-ionophore, increased charybdotoxin and iberiatoxin sensitive 42K efflux in human urinary bladder smooth muscle cells, suggesting that large conductance Ca²⁺-dependent K-channels are present in these cells. NS004, a large conductance Ca²⁺-dependent K-channel opener, relaxed guinea pig bladder strips precontracted with 15 mM KCl which is inhibited by iberiatoxin. In addition, NS004 also evoked an iberiatoxin sensitive increase in 86Rb/42K efflux in guinea pig and human urinary bladder smooth muscle cells, demonstrating that NS004 activates large conductance Ca²⁺-dependent K-channels to achieve its relaxation effect in the bladder.
 CC 13-2 (Mammalian Biochemistry)
 OS.CITING REF COUNT: 22 THERE ARE 22 CAPLUS RECORDS THAT CITE THIS RECORD (22 CITINGS)

L87 ANSWER 22 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 1995:688039 ZCPLUS Full-text
 DOCUMENT NUMBER: 123:132383
 ORIGINAL REFERENCE NO.: 123:23233a,23236a
 TITLE: Zeneca ZD6169 and its analogs from a novel series of anilide tertiary carbinols: in vitro KATP channel opening activity in bladder detrusor
 AUTHOR(S): Li, J. X.; Yasay, G. D.; Zografas, P.; Kau, S. T.; Ohnmacht, C. J.; Russell, K.; Empfield, J. R.; Brown, F. J.; Trainor, D. A.; et al.
 CORPORATE SOURCE: Department Pharmacology, Zeneca Pharmaceuticals Group, Wilmington, DE, USA
 SOURCE: Pharmacology (1995), 51(1), 33-42
 CODEN: PHMGBN; ISSN: 0031-7012
 PUBLISHER: Karger

10/597378

DOCUMENT TYPE: Journal
LANGUAGE: English

AB The potassium (K^+) channel opening activity of Zeneca ZD6169 and one of its pyridylsulfonyl analogs from the anilide tertiary carbinol series was ascertained. Their mechanoinhibitory effects on the myogenic activity of the guinea pig bladder detrusor muscle were measured in a set of functional assays. Elevating the K^+ concentration in the tissue bath from 15 to 80 mmol/L increased the IC₅₀ value of ZD6169 from 1.61 ± 0.22 to $223 \pm 37 \mu\text{mol}/\text{L}$. This result suggest that ZD6169 may act as a K^+ channel opener. Similar to the prototypic ATP-sensitive K^+ (KATP) channel opener cromakalim, the K^+ channel openers from the anilide tertiary carbinol series displayed stereoselective mechanoinhibitory activity only in the test protocol in which the detrusor was stimulated with 15 mmol/L KCl. Being the active enantiomer, ZD6169 has an activity more than 30-fold higher than the less active enantiomer. ZD6169 at 10 $\mu\text{mol}/\text{L}$ hyperpolarized the guinea pig detrusor membrane potential by $6.1 \pm 1.2 \text{ mV}$ and increased the whole cell KATP current in isolated guinea pig smooth muscle cells by $34.9 \pm 7.9 \text{ pA}$. This is comparable to the increase of $26.8 \pm 5.0 \text{ pA}$ obtained with 10 $\mu\text{mol}/\text{L}$ of lemakalim, the active enantiomer of cromakalim. The K^+ channel opening activity of ZD6169 and the pyridylsulfonyl analog was competitively antagonized by the KATP channel blocker glibenclamide in the guinea pig detrusor with a pA₂ value of 7.2. This activity, however, was unaffected by blockers of small and large conductance Ca-dependent K^+ channels, such as apamin and charybdotoxin, resp. The present study showed that Zeneca ZD6169 and its analog from the anilide tertiary carbinol series are K^+ channel openers that activate KATP channels in vitro to relax bladder detrusors.

CC 1-8 (Pharmacology)

OS.CITING REF COUNT: 18 THERE ARE 18 CAPLUS RECORDS THAT CITE THIS RECORD (18 CITINGS)

L87 ANSWER 23 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:315448 ZCPLUS Full-text
DOCUMENT NUMBER: 120:315448
ORIGINAL REFERENCE NO.: 120:55197a,55200a
TITLE: A highly potent series of fluoroalkyl benzoxazine pyridine-N-oxide potassium channel openers
AUTHOR(S): Russell, K.; Brown, F. J.; Warwick, P.; Forst, J.; Grant, T.; Howe, B.; Kau, S. T.; Li, J. H.; McLaren, F. M.; et al.

CORPORATE SOURCE: Med. Chem. Dep., ZENECA Pharm. Group, Wilmington, DE, 19897, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (1993), 3(12), 2727-8
CODEN: BMCLE8; ISSN: 0960-894X

DOCUMENT TYPE: Journal
LANGUAGE: English

AB A new structural class of fluoroalkyl benzoxazine pyridine-N-oxide potassium channel openers with antihypertensive properties is described.

CC 1-8 (Pharmacology)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)

L87 ANSWER 24 OF 37 ZCPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 1994:315769 ZCPLUS Full-text
DOCUMENT NUMBER: 120:315769
ORIGINAL REFERENCE NO.: 120:55277a,55280a
TITLE: Anilide tertiary carbinols: a new structural class of potent potassium channel openers
AUTHOR(S): Grant, T.; Frank, C. A.; Kau, S. T.; Li, J. H.;

CORPORATE SOURCE: McLaren, F. M.; Ohnmacht, C. J.; Russell, K.; Shapiro, H. S.; Trivedi, S.
 Med. Chem. Dep., ZENECA Pharm. Group, Wilmington, DE, 19897, USA
 SOURCE: Bioorganic & Medicinal Chemistry Letters (1993), 3(12), 2723-4
 CODEN: BMCLE8; ISSN: 0960-894X
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB A new structural class of anilide tertiary carbinol potassium channel openers (PCOs) is described, particularly with respect to drugs with possible therapeutic effects for the treatment of urinary incontinence. These carbinol potassium channel openers interact with the KATP channel in guinea pig detrusor smooth muscle.

CC 1-12 (Pharmacology)

OS.CITING REF COUNT: 9 THERE ARE 9 CAPLUS RECORDS THAT CITE THIS RECORD
 (9 CITINGS)

L87 ANSWER 25 OF 37 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN DUPLICATE 2

ACCESSION NUMBER: 2006:584351 BIOSIS Full-text

DOCUMENT NUMBER: PREV200600594977

TITLE: Attenuation of tumor angiogenesis in routine melanoma model using liposomal formulation of Coenzyme Q10.
 Persaud, Indushekar [Reprint Author]; Narain, Niven R.; Woan, Winston; Russell, Kathryn J.; Malik, Lindsey J.; Ricotti, Carlos A.; Li, Jie; Elgart, George; Hsia, Sung L.

CORPORATE SOURCE: Univ Miami, Miami, FL 33152 USA

SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (APR 2006) Vol. 47, pp. 230.
 Meeting Info.: 97th Annual Meeting of the American-Association-for-Cancer-Research (AACR). Washington, DC, USA. April 01 -05, 2006. Amer Assoc Canc Res.

ISSN: 0197-016X.

DOCUMENT TYPE: Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 8 Nov 2006

Last Updated on STN: 8 Nov 2006

CONCEPT CODE: General biology - Symposia, transactions and proceedings 00520

Cytology - Animal 02506

Cytology - Human 02508

Biochemistry studies - Proteins, peptides and amino acids 10064

Pathology - Therapy 12512

Integumentary system - Physiology and biochemistry 18504

Integumentary system - Pathology 18506

Pharmacology - General 22002

Pharmacology - Clinical pharmacology 22005

Neoplasms - Pathology, clinical aspects and systemic effects 24004

Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts

Pharmacology; Integumentary System (Chemical

Ordered
4/22/10

INDEX TERMS: Coordination and Homeostasis); Tumor Biology
 Parts, Structures, & Systems of Organisms
 skin: integumentary system; epithelial cell; fibroblast;
 mitochondrion; squamous cell

INDEX TERMS: Diseases
 melanoma: neoplastic disease, integumentary system
 disease, drug therapy
 Melanoma (MeSH)

INDEX TERMS: Diseases
 squamous cell carcinoma: neoplastic disease,
 integumentary system disease, drug therapy
 Carcinoma, Squamous Cell (MeSH)

INDEX TERMS: Chemicals & Biochemicals
 Bcl-2; coenzyme Q10: antineoplastic-drug,
 topical administration

INDEX TERMS: Miscellaneous Descriptors
 angiogenesis

ORGANISM: Classifier
 Hominidae 86215
 Super Taxa
 Primates; Mammalia; Vertebrata; Chordata; Animalia
 Organism Name
 SKMEL 28 cell line (cell_line): human melanoma cells
 Taxa Notes
 Animals, Chordates, Humans, Mammals, Primates,
 Vertebrates

ORGANISM: Classifier
 Muridae 86375
 Super Taxa
 Rodentia; Mammalia; Vertebrata; Chordata; Animalia
 Organism Name
 mouse (common)
 Taxa Notes
 Animals, Chordates, Mammals, Nonhuman Vertebrates,
 Nonhuman Mammals, Rodents, Vertebrates

REGISTRY NUMBER: 303-98-0 (coenzyme Q10)

L87 ANSWER 26 OF 37 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on
 STN DUPLICATE 3

ACCESSION NUMBER: 2006:584165 BIOSIS Full-text

DOCUMENT NUMBER: PREV200600594791

TITLE: Coenzyme Q10: A novel bcl-2 drug target for the
 treatment of melanoma.

AUTHOR(S): Narain, Niven R. [Reprint Author]; Persaud,
 Indushekar; Russell, Kathryn J.; Wean, Karrune V.;
 Malik, Lindsey H.; Ricotti, Carlos A. Jr.; Nassiri, Mehdi;
 Barrientos, Antoni; Hsia, Sung L.

CORPORATE SOURCE: Univ Miami, Miller Sch Med, Miami, FL 33152 USA

SOURCE: Proceedings of the American Association for Cancer Research
 Annual Meeting, (APR 2006) Vol. 47, pp. 187.
 Meeting Info.: 97th Annual Meeting of the
 American-Association-for-Cancer-Research (AACR).
 Washington, DC, USA. April 01 -05, 2006. Amer Assoc Canc
 Res.

ISSN: 0197-016X.

DOCUMENT TYPE: Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 8 Nov 2006

Last Updated on STN: 8 Nov 2006

Ordered
 4/22/10

10/597378

CONCEPT CODE: General biology - Symposia, transactions and proceedings
00520
Cytology - Animal 02506
Genetics - General 03502
Genetics - Animal 03506
Pathology - Therapy 12512
Metabolism - General metabolism and metabolic pathways
13002
Integumentary system - Physiology and biochemistry 18504
Pharmacology - General 22002
Neoplasms - Pathology, clinical aspects and systemic
effects 24004
Neoplasms - Therapeutic agents and therapy 24008
INDEX TERMS: Major Concepts
Pharmacology; Metabolism; Molecular Genetics
(Biochemistry and Molecular Biophysics); Integumentary
System (Chemical Coordination and Homeostasis); Tumor
Biology
INDEX TERMS: Parts, Structures, & Systems of Organisms
skin cell: integumentary system
INDEX TERMS: Diseases
melanoma: neoplastic disease, drug therapy, etiology
Melanoma (MeSH)
INDEX TERMS: Chemicals & Biochemicals
bcl-2: drug target, expression, downregulation;
coenzyme Q10: antineoplastic-drug, pharmacodynamics
INDEX TERMS: Miscellaneous Descriptors
skin cell metabolism
ORGANISM: Classifier
Animalia 33000
Super Taxa
Animalia
Organism Name
animal (common)
Taxa Notes
Animals
REGISTRY NUMBER: 303-98--0 (coenzyme Q10)
GENE NAME: animal livin gene (Animalia): expression, downregulation;
animal survivin gene (Animalia): expression, downregulation

L87 ANSWER 27 OF 37 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on
STN DUPLICATE 5

ACCESSION NUMBER: 2007:263904 BIOSIS Full-text
DOCUMENT NUMBER: PREV200700273971

TITLE: Coenzyme Q10 inhibits proliferation of breast cancer
cells while stabilizing growth in primary cells in vitro.
Malik, Lindsey H. [Reprint Author]; Narain, Niven R.;
Russell, Kathryn J.; Woan, Karrune V.; Persaud,
Indushekhar; Li, Jie; Hsia, Sung L.

AUTHOR(S):

CORPORATE SOURCE: Univ Miami, Sch Med, Miami, FL USA
SOURCE: Proceedings of the American Association for Cancer Research
Annual Meeting, (APR 2005) Vol. 46, pp. 1384-1385.
Meeting Info.: 96th Annual Meeting of the
American-Association-for-Cancer-Research. Anaheim, CA, USA.
April 16-20, 2005. Amer Assoc Canc Res.

DOCUMENT TYPE: ISSN: 0197-016X.
Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English
ENTRY DATE: Entered STN: 25 Apr 2007

Ordered
4/22/10

CONCEPT CODE: Last Updated on STN: 11 Jul 2007
 General biology - Symposia, transactions and proceedings
 00520
 Cytology - Animal 02506
 Cytology - Human 02508
 Pathology - Therapy 12512
 Reproductive system - Pathology 16506
 Integumentary system - Physiology and biochemistry 18504
 Pharmacology - General 22002
 Pharmacology - Clinical pharmacology 22005
 Neoplasms - Pathology, clinical aspects and systemic
 effects 24004
 Neoplasms - Carcinogens and carcinogenesis 24007
 Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts
 Pharmacology; Tumor Biology

INDEX TERMS: Parts, Structures, & Systems of Organisms
 keratinocyte: integumentary system

INDEX TERMS: Diseases
 breast cancer: neoplastic disease, reproductive
 system disease/female
 Breast Neoplasms (MeSH)

INDEX TERMS: Chemicals & Biochemicals
 MUC-1: expression; coenzyme Q10: antineoplastic-drug

INDEX TERMS: Miscellaneous Descriptors
 apoptosis; cell proliferation; carcinogenesis; serum

ORGANISM: Classifier
 Hominidae 86215
 Super Taxa
 Primates; Mammalia; Vertebrata; Chordata; Animalia
 Organism Name
 MDA-MB-468 cell line (cell_line): human breast cancer
 cells
 BT-20 cell line (cell_line): human breast cancer cells
 ZR-75 cell line (cell_line): human breast cancer cells
 MCF 7 cell line (cell_line): human breast cancer cells
 SK-BR3 cell line (cell_line): human breast cancer cells

Taxa Notes
 Animals, Chordates, Humans, Mammals, Primates,
 Vertebrates

ORGANISM: Classifier
 Muridae 86375
 Super Taxa
 Rodentia; Mammalia; Vertebrata; Chordata; Animalia
 Organism Name
 mouse (common)
 Taxa Notes
 Animals, Chordates, Mammals, Nonhuman Vertebrates,
 Nonhuman Mammals, Rodents, Vertebrates

REGISTRY NUMBER: 303-98-0 (coenzyme Q10)

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 STN DUPLICATE 6

ACCESSION NUMBER: 2007:258312 BIOSIS Full-text

DOCUMENT NUMBER: PREV200700268379

TITLE: Coenzyme Q10 induces apoptosis in human prostate and
 osteosarcoma cells.

AUTHOR(S): Persaud, Indushekh [Reprint Author]; Narain, Niven
 R.; Woan, Karrune V.; Russell, Kathryn J.; Malik,
 Lindsey H.; Li, Jie; Lokeshwar, Balakrishna L.; Hsia,

Sung L.
 CORPORATE SOURCE: Univ Miami, Sch Med, Miami, FL 33152 USA
 SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (APR 2005) Vol. 46, pp. 65.
 Meeting Info.: 96th Annual Meeting of the American-Association-for-Cancer-Research. Anaheim, CA, USA. April 16 -20, 2005. Amer Assoc Canc Res.
 ISSN: 0197-016X.
 DOCUMENT TYPE: Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)

LANGUAGE: English
 ENTRY DATE: Entered STN: 25 Apr 2007
 Last Updated on STN: 11 Jul 2007
 CONCEPT CODE: General biology - Symposia, transactions and proceedings 00520
 Cytology - Animal 02506
 Cytology - Human 02508
 Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
 Pathology - Therapy 12512
 Urinary system - Pathology 15506
 Reproductive system - Physiology and biochemistry 16504
 Reproductive system - Pathology 16506
 Bones, joints, fasciae, connective and adipose tissue - Physiology and biochemistry 18004
 Bones, joints, fasciae, connective and adipose tissue - Pathology 18006
 Integumentary system - Physiology and biochemistry 18504
 Pharmacology - General 22002
 Pharmacology - Clinical pharmacology 22005
 Neoplasms - Pathology, clinical aspects and systemic effects 24004
 Neoplasms - Therapeutic agents and therapy 24008
 INDEX TERMS: Major Concepts
 Pharmacology; Skeletal System (Movement and Support); Reproductive System (Reproduction); Tumor Biology
 INDEX TERMS: Parts, Structures, & Systems of Organisms
 bone: skeletal system; prostate: reproductive system; fibroblast; keratinocyte: integumentary system; mitochondrion
 INDEX TERMS: Diseases
 osteosarcoma: neoplastic disease, bone disease
 Bone Neoplasms (MeSH); Osteosarcoma (MeSH)
 INDEX TERMS: Diseases
 prostate cancer: urologic disease, reproductive system disease/male, neoplastic disease, drug therapy
 Prostatic Neoplasms (MeSH)
 INDEX TERMS: Chemicals & Biochemicals
 ATP; JC-1; coenzyme Q10: antineoplastic-drug
 INDEX TERMS: Miscellaneous Descriptors
 apoptosis; mitochondrial polarity
 ORGANISM: Classifier
 Hominidae 86215
 Super Taxa
 Primates; Mammalia; Vertebrata; Chordata; Animalia
 Organism Name
 143B cell line (cell_line): human osteosarcoma cells
 PC3 cell line (cell_line): human prostate cancer cells
 Taxa Notes
 Animals, Chordates, Humans, Mammals, Primates,

Ordered
 4/22/10

Vertebrates
 REGISTRY NUMBER: 111839-44-2 (ATP)
 303-98-0 (coenzyme Q10)

L87 ANSWER 29 OF 37 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on
 STN DUPLICATE 7

ACCESSION NUMBER: 2005:405818 BIOSIS Full-text
 DOCUMENT NUMBER: PREV200510197637

TITLE: Coenzyme Q10 attenuates angiogenesis in melanoma.
 AUTHOR(S): Narain, N. R. [Reprint Author]; Elgart, G. W.; Persaud, I.; Woan, K. V.; Russell, K. J.; Malik, L. H.; Li, J.; Hsia, S. I.

CORPORATE SOURCE: Univ Miami, Miller Sch Med, Miami, FL 33152 USA
 SOURCE: Journal of Investigative Dermatology, (APR 2005) Vol. 124, No. 4, Suppl. S, pp. A24.
 Meeting Info.: 66th Annual Meeting of the Society-for-Investigative-Dermatology. St Louis, MO, USA. May 04 -07, 2005. Soc Investigat Dermatol.
 CODEN: JIDEAE. ISSN: 0022-202X.

DOCUMENT TYPE: Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 12 Oct 2005
 Last Updated on STN: 12 Oct 2005

CONCEPT CODE: General biology - Symposia, transactions and proceedings 00520
 Cytology - Animal 02506
 Cytology - Human 02508
 Biochemistry studies - General 10060
 Biochemistry studies - Proteins, peptides and amino acids 10064
 Endocrine - General 17002
 Neoplasms - Pathology, clinical aspects and systemic effects 24004

INDEX TERMS: Major Concepts
 Biochemistry and Molecular Biophysics; Tumor Biology

INDEX TERMS: Diseases
 melanoma: neoplastic disease
 Melanoma (MeSH)

INDEX TERMS: Chemicals & Biochemicals
 vascular endothelial growth factor [VEGF]; coenzyme Q10; HIF-1 alpha: regulation

INDEX TERMS: Methods & Equipment
 pathological analysis: laboratory techniques

INDEX TERMS: Miscellaneous Descriptors
 apoptosis; angiogenesis

ORGANISM: Classifier
 Hominidae 86215
 Super Taxa
 Primates; Mammalia; Vertebrata; Chordata; Animalia
 Organism Name
 SKMEL-28 cell line (cell_line): human melanoma cells

Taxa Notes
 Animals, Chordates, Humans, Mammals, Primates,
 Vertebrates

ORGANISM: Classifier
 Muridae 86375
 Super Taxa
 Rodentia; Mammalia; Vertebrata; Chordata; Animalia
 Organism Name

Ordered
 4/22/10

mouse (common)
 Taxa Notes
 Animals, Chordates, Mammals, Nonhuman Vertebrates,
 Nonhuman Mammals, Rodents, Vertebrates
 REGISTRY NUMBER: 127464-60-2 (vascular endothelial growth factor)
 127464-60-2 (VEGF)
 303-98-0 (coenzyme Q10)

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 STN DUPLICATE 8

ACCESSION NUMBER: 2005:319513 BIOSIS Full-text
 DOCUMENT NUMBER: PREV200510114908
 TITLE: Coenzyme Q10 induces apoptosis in human melanoma cells.
 AUTHOR(S): Narain, N. R. [Reprint Author]; Li, J.; Woan, K. V.;
 Russell, K. J.; Ochoa, M. S.; Persaud, I.; Fenjves, E.
 S.; Hsia, S. L.
 CORPORATE SOURCE: Univ Miami, Sch Med, Diabet Res Inst, Miami, FL USA
 SOURCE: Journal of Investigative Dermatology, (MAR 2004) Vol. 122,
 No. 3, pp. A160.
 Meeting Info.: 65th Annual Meeting of the
 Society-for-Investigative-Dermatology. Providence, RI, USA.
 April 28 -May 01, 2004. Soc Investigat Dermatol.
 CODEN: JIDEAE. ISSN: 0022-202X.
 DOCUMENT TYPE: Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LANGUAGE: English
 ENTRY DATE: Entered STN: 25 Aug 2005
 Last Updated on STN: 25 Aug 2005
 CONCEPT CODE: General biology - Symposia, transactions and proceedings
 00520
 Cytology - Animal 02506
 Cytology - Human 02508
 Biochemistry studies - Proteins, peptides and amino acids
 10064
 Pathology - Therapy 12512
 Integumentary system - Physiology and biochemistry 18504
 Pharmacology - General 22002
 Pharmacology - Clinical pharmacology 22005
 Neoplasms - Pathology, clinical aspects and systemic
 effects 24004
 Neoplasms - Therapeutic agents and therapy 24008
 INDEX TERMS: Major Concepts
 Pharmacology; Integumentary System (Chemical
 Coordination and Homeostasis); Tumor Biology
 INDEX TERMS: Parts, Structures, & Systems of Organisms
 fibroblasts
 INDEX TERMS: Diseases
 melanoma: neoplastic disease
 Melanoma (MeSH)
 INDEX TERMS: Chemicals & Biochemicals
 annexin V; 7-AAD; coenzyme Q10: antineoplastic-drug
 INDEX TERMS: Methods & Equipment
 flow cytometry: laboratory techniques, histology and
 cytology techniques
 INDEX TERMS: Miscellaneous Descriptors
 apoptotic pathway
 ORGANISM: Classifier
 Hominidae 86215
 Super Taxa
 Primates; Mammalia; Vertebrata; Chordata; Animalia

Ordered
4/22/10

Organism Name
 SKMEL28 cell line (cell_line)
 Taxa Notes
 Animals, Chordates, Humans, Mammals, Primates,
 Vertebrates
 REGISTRY NUMBER: 303-98-0 (coenzyme Q10)

L87 ANSWER 31 OF 37 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on
 STN DUPLICATE 9

ACCESSION NUMBER: 2005:319512 BIOSIS Full-text
 DOCUMENT NUMBER: PREV200510114907

TITLE: Topical formulation of coenzyme Q10 inhibits the growth of melanoma tumors.

AUTHOR(S): Narain, N. R. [Reprint Author]; Li, J.; He, J.; Malik, L. H.; Russell, K. J.; Woan, K. V.; Persaud, T.; Hsia, S. L.

CORPORATE SOURCE: Univ Miami, Sch Med, Miami, FL USA
 SOURCE: Journal of Investigative Dermatology, (MAR 2004) Vol. 122, No. 3, pp. A160.
 Meeting Info.: 65th Annual Meeting of the Society-for-Investigative-Dermatology. Providence, RI, USA. April 28 -May 01, 2004. Soc Investigat Dermatol.
 CODEN: JIDEAE. ISSN: 0022-202X.

DOCUMENT TYPE: Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)

LANGUAGE: English
 ENTRY DATE: Entered STN: 25 Aug 2005
 Last Updated on STN: 25 Aug 2005

CONCEPT CODE: General biology - Symposia, transactions and proceedings 00520
 Cytology - Animal 02506
 Cytology - Human 02508
 Pathology - Therapy 12512
 Pharmacology - General 22002
 Pharmacology - Clinical pharmacology 22005
 Neoplasms - Pathology, clinical aspects and systemic effects 24004
 Neoplasms - Therapeutic agents and therapy 24008
 Major Concepts

INDEX TERMS: Major Concepts
 Pharmacology; Tumor Biology
 INDEX TERMS: Diseases
 melanoma: neoplastic disease
 Melanoma (MeSH)

INDEX TERMS: Chemicals & Biochemicals
 coenzyme Q10; liposome-encapsulated Q10 cream:
 antineoplastic-drug, topical administration

INDEX TERMS: Methods & Equipment
 transfection: laboratory techniques, genetic techniques;
 histological examination: laboratory techniques,
 histology and cytology techniques

ORGANISM: Classifier
 Hominidae 86215
 Super Taxa
 Primates; Mammalia; Vertebrata; Chordata; Animalia
 Organism Name
 SKMEL28 cell line (cell_line)
 Taxa Notes
 Animals, Chordates, Humans, Mammals, Primates,
 Vertebrates

ORGANISM: Classifier

Muridae 86375
 Super Taxa
 Rodentia; Mammalia; Vertebrata; Chordata; Animalia
 Organism Name
 mouse (common)
 Taxa Notes
 Animals, Chordates, Mammals, Nonhuman Vertebrates,
 Nonhuman Mammals, Rodents, Vertebrates
 REGISTRY NUMBER: 303~98~0 (coenzyme Q10)

L87 ANSWER 32 OF 37 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on
 STN DUPLICATE 10

ACCESSION NUMBER: 2004:390480 BIOSIS Full-text
 DOCUMENT NUMBER: PREV200400390557
 TITLE: Coenzyme Q10 inhibits the proliferation of oncogenic cells while stabilizing growth in primary cells in vitro.
 Narain, N. R. [Reprint Author]; Li, J.; Russell, K. J.; Woan, K. V.; He, I.; Persaud, T.; Ricotti, C. A.; Fenjves, E. S.; Neia, S. L.
 CORPORATE SOURCE: Sch MedDiabet Res Inst, Univ Miami, Miami, FL, 33152, USA
 SOURCE: Journal of Investigative Dermatology, (March 2004) Vol. 122, No. 3, pp. A28. print.
 Meeting Info.: The 65th Annual Meeting of the Society for Investigative Dermatology. Providence, Rhode Island, USA. April 28-May 01, 2004. Society for Investigative Dermatology.
 ISSN: 0022-202X (ISSN print).
 DOCUMENT TYPE: Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LANGUAGE: English
 ENTRY DATE: Entered STN: 6 Oct 2004
 Last Updated on STN: 6 Oct 2004
 CONCEPT CODE: General biology - Symposia, transactions and proceedings 00520
 Cytology - General 02502
 Cytology - Animal 02506
 Cytology - Human 02508
 Biochemistry studies - General 10060
 Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
 Pathology - Therapy 12512
 Integumentary system - Physiology and biochemistry 18504
 Integumentary system - Pathology 18506
 Pharmacology - General 22002
 Pharmacology - Clinical pharmacology 22005
 Pharmacology - Integumentary system, dental and oral biology 22020
 Neoplasms - Pathology, clinical aspects and systemic effects 24004
 Neoplasms - Therapeutic agents and therapy 24008
 Pediatrics 25000
 INDEX TERMS: Major Concepts
 Biochemistry and Molecular Biophysics; Cell Biology;
 Integumentary System (Chemical Coordination and Homeostasis); Pharmacology; Tumor Biology
 INDEX TERMS: Parts, Structures, & Systems of Organisms
 fibroblast; keratinocyte: integumentary system;
 oncogenic cell, growth stabilization, proliferation
 INDEX TERMS: Diseases
 malignant melanoma: integumentary system disease,

INDEX TERMS:
 neoplastic disease
 Melanoma (MeSH)
 INDEX TERMS:
 Diseases
 squamous cell carcinoma: integumentary system disease,
 neoplastic disease
 Carcinoma, Squamous Cell (MeSH)
 INDEX TERMS:
 Chemicals & Biochemicals
 ATP; coenzyme Q10: antineoplastic-drug,
 dermatological-drug, pharmacodynamics
 ORGANISM:
 Classifier
 Hominidae 86215
 Super Taxa
 Primates; Mammalia; Vertebrata; Chordata; Animalia
 Organism Name
 human (common): neonate
 Taxa Notes
 Animals, Chordates, Humans, Mammals, Primates,
 Vertebrates
 REGISTRY NUMBER:
 56-65-5Q (ATP)
 42530-29-0Q (ATP)
 94587-45-8Q (ATP)
 111839-44-2Q (ATP)
 303-98-0 (coenzyme Q10)

L87 ANSWER 33 OF 37 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on
 STN
 ACCESSION NUMBER: 2009:494884 BIOSIS Full-text
 DOCUMENT NUMBER: PREV200900495987
 TITLE: Apoptotic affect of Ubiquinone precursors in melanoma.
 AUTHOR(S): Persaud, Indushekhar [Reprint Author]; McCook, John P.;
 Alarcon, Maria E.; Bhangu, Thara; Cepero, Maria; Narain, Niven R.
 CORPORATE SOURCE: Univ Miami, Miami, FL USA
 SOURCE: Proceedings of the American Association for Cancer Research
 Annual Meeting, (APR 2009) Vol. 50, pp. 794.
 Meeting Info.: 100th Annual Meeting of the
 American-Association-for-Cancer-Research. Denver, CA, USA.
 April 18 -22, 2009. Amer Assoc Canc Res.
 ISSN: 0197-016X.
 DOCUMENT TYPE: Conference; (Meeting)
 Conference; Abstract; (Meeting Abstract)
 LANGUAGE: English
 ENTRY DATE: Entered STN: 19 Aug 2009
 Last Updated on STN: 19 Aug 2009
 CONCEPT CODE: General biology - Symposia, transactions and proceedings
 00520
 Biochemistry studies - General 10060
 Biochemistry studies - Vitamins 10063
 Biochemistry studies - Proteins, peptides and amino acids
 10064
 Enzymes - General and comparative studies: coenzymes
 10802
 Integumentary system - Physiology and biochemistry 18504
 Integumentary system - Pathology 18506
 Neoplasms - Pathology, clinical aspects and systemic
 effects 24004
 INDEX TERMS:
 Major Concepts
 Integumentary System (Chemical Coordination and
 Homeostasis); Tumor Biology; Biochemistry and
 Molecular Biophysics

10/597378

INDEX TERMS: Diseases
melanoma: neoplastic disease, integumentary system
disease, etiology
Melanoma (MeSH)

INDEX TERMS: Chemicals & Biochemicals
Bcl-2: expression; L-phenylalanine; pyridoxine;
mevalonic acid; L-tyrosine; phenylacetate;
ubiquinone-10; 4-hydroxyphenylpyruvate; caspase-3
[EC 3.4.22.56]; ubiquinone precursor

INDEX TERMS: Miscellaneous Descriptors
apoptotic affect

ORGANISM: Classifier
Animalia 33000

Super Taxa
Animalia

Organism Name
animal (common)

Taxa Notes
Animals

REGISTRY NUMBER: 63-91-2 (L-phenylalanine)
65-23-6 (pyridoxine)
150-97-0 (mevalonic acid)
60-18-4 (L-tyrosine)
7631-42-7 (phenylacetate)
606-06-4 (ubiquinone-10)
169592-56-7 (caspase-3)
169592-56-7 (EC 3.4.22.56)

L87 ANSWER 34 OF 37 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on
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ACCESSION NUMBER: 2009:431590 BIOSIS Full-text

DOCUMENT NUMBER: PREV200900432693

TITLE: NORMALIZATION OF BCL-2 FAMILY MEMBERS IN BREAST CANCER BY
COENZYME Q10.

AUTHOR(S): Pinto, Lizbeth [Reprint Author]; Sloan, Alexis; Persaud,
Indushekhar; Narain, Niven R.

CORPORATE SOURCE: Univ Miami, Miller Sch Med, Dept Dermatol and Cutaneous
Surg, Miami, FL 33136 USA

SOURCE: Ethnicity & Disease, (SUM 2009) Vol. 19, No. 2, Suppl. 3,
pp. S17-S18.
ISSN: 1049-510X.

DOCUMENT TYPE: Article

LANGUAGE: English

ENTRY DATE: Entered STN: 22 Jul 2009
Last Updated on STN: 22 Jul 2009

ABSTRACT:Cancer is second only to heart disease as the leading cause of death in the United States. Indeed, it is estimated that approximately 178,000 new breast cancer cases were diagnosed in 2007 and 40,000 women will succumb to the disease. The nature of the disease makes it very resistant to chemotherapeutic intervention and radiation. The balance of the Bcl-2 protein family has been implicated as the major contributing factor to conferral of resistance to cancer therapy. Previous work from our research group has demonstrated that Coenzyme Q10 (Q10) is able to significantly decrease Bcl-2 and thereby induce apoptosis in melanoma and prostate cancer. Hence, we postulated that Q10 may have a pro-apoptotic effect in breast cancer. To investigate this hypothesis, we employed the Sk-Br3 and MCF-7 breast cancer lines which exhibit a mutation Her-2/neu and p53 respectively. We examined the effect of Coenzyme Q10 on various members of the Bcl-2 family (bcl-2, bcl-xl, bid, bad, bak, mcl-1, bim, and bax), p53, and caspases 3, 6, 9. All cells were treated for 0-24 hours in the presence and absence of 50 μM and

100 μM Q10 under physiologic conditions after which total protein was isolated and subjected to Western blot analysis to measure the aforementioned protein products. The results of our study may provide a template for further investigation into the mechanism of action of mammary oncogenesis while providing support for the use of Coenzyme Q10 as an adjuvant breast cancer therapy. The results showed that there was an upregulation in protein expression of proapoptotic members and BH3 subfamily members such as bid, bad, bax, bim, and bak whereas the anti-apoptotic members bcl-xL, mcl-1, and bcl-2 significantly decreased in total protein expression between 4 and 12 hours. Commitment to apoptosis was confirmed by activation of caspase 3, 6 and 9. Conversely, administration of Coenzyme Q10 to mammary fibroblasts did not elicit a significant response on any of the aforementioned intracellular proteins involved in programmed cell death. The data herein suggest that Coenzyme Q10 is able to modulate the various subfamilies of the Bcl-2 family in a manner that restores the apoptotic potential in breast cancer without presenting any adverse effects to normal breast tissue. This provides a template for further investigation into the mechanism of action of mammary oncogenesis while providing support for the use of Coenzyme Q10 as an adjuvant in breast cancer therapy.

CONCEPT CODE: Cytology - Animal 02506
 Cytology - Human 02508
 Biochemistry studies - General 10060
 Biochemistry studies - Proteins, peptides and amino acids 10064

 Pathology - Diagnostic 12504
 Cardiovascular system - Heart pathology 14506
 Urinary system - Pathology 15506
 Reproductive system - Pathology 16506
 Integumentary system - Pathology 18506
 Neoplasms - Diagnostic methods 24001
 Neoplasms - Pathology, clinical aspects and systemic effects 24004

INDEX TERMS: Major Concepts
 Oncology (Human Medicine, Medical Sciences);
 Biochemistry and Molecular Biophysics; Gynecology (Human Medicine, Medical Sciences)

INDEX TERMS: Parts, Structures, & Systems of Organisms
 fibroblast

INDEX TERMS: Diseases
 prostate cancer: urologic disease, reproductive system disease/male, neoplastic disease
 Prostatic Neoplasms (MeSH)

INDEX TERMS: Diseases
 breast cancer: neoplastic disease, reproductive system disease/female, diagnosis, mortality
 Breast Neoplasms (MeSH)

INDEX TERMS: Diseases
 heart disease: heart disease
 Heart Diseases (MeSH)

INDEX TERMS: Diseases
 melanoma: neoplastic disease, integumentary system disease
 Melanoma (MeSH)

INDEX TERMS: Chemicals & Biochemicals
 bcl-2; coenzyme Q-10; p53 protein: mutation; bcl-xL;
 mcl-1; caspase 3 [EC 3.4.22.56]: activation; caspase 9 [EC 3.4.22.62]: activation; caspase 6 [EC 3.4.22.59]: activation; Her-2/neu: mutation; bak protein: upregulation; bim: upregulation; bid: upregulation; bad: upregulation; bax protein: upregulation

10/597378

INDEX TERMS:

Methods & Equipment

chemotherapy: therapeutic and prophylactic techniques, clinical techniques; radiation therapy: therapeutic and prophylactic techniques, clinical techniques; cancer therapy: therapeutic and prophylactic techniques, clinical techniques; Western blot analysis: laboratory techniques, genetic techniques; adjuvant breast cancer therapy: therapeutic and prophylactic techniques, clinical techniques

INDEX TERMS:

Miscellaneous Descriptors

apoptosis

GEOGRAPHICAL TERMS:

USA (North America, Nearctic region)

ORGANISM:

Classifier

Hominidae 86215

Super Taxa

Primates; Mammalia; Vertebrata; Chordata; Animalia

Organism Name

human (common): female

MCF7 cell line (cell_line): human breast

adenocarcinoma cells

SkBr3 cell line (cell_line): human breast cancer cells

Taxa Notes

Animals, Chordates, Humans, Mammals, Primates,

Vertebrates

REGISTRY NUMBER:

303-98-0 (coenzyme Q-10)

169592-56-7 (caspase 3)

169592-56-7 (EC 3.4.22.56)

180189-96-2 (caspase 9)

180189-96-2 (EC 3.4.22.62)

182372-15-2 (caspase 6)

182372-15-2 (EC 3.4.22.59)

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ACCESSION NUMBER: 2008:488647 BIOSIS Full-text

DOCUMENT NUMBER: PREV200800488646

TITLE: Normalization of Bcl-2 family members in breast cancer by Coenzyme Q10.

AUTHOR(S): Narain, Niven R. [Reprint Author]; Sloan, Alexis; Pinto, Lizbeth; McCook, John P.; Persaud, Indushekhar

CORPORATE SOURCE: Univ Miami, Miller Sch Med, Miami, FL 33152 USA

SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (APR 2008) Vol. 49, pp. 1043-1044.

Meeting Info.: 99th Annual Meeting of the American-Association-for-Cancer-Research. San Diego, CA, USA. April 12 -16, 2008. Amer Assoc Canc Res.

ISSN: 0197-016X.

DOCUMENT TYPE: Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 3 Sep 2008

Last Updated on STN: 3 Sep 2008

CONCEPT CODE: General biology - Symposia, transactions and proceedings 00520

Cytology - Human 02508

Biochemistry studies - Proteins, peptides and amino acids 10064

Enzymes - General and comparative studies: coenzymes

10802

Pathology - Diagnostic 12504

Reproductive system - Physiology and biochemistry 16504
 Reproductive system - Pathology 16506
 Neoplasms - Diagnostic methods 24001
 Neoplasms - Pathology, clinical aspects and systemic effects 24004
INDEX TERMS:
 Major Concepts
 Enzymology (Biochemistry and Molecular Biophysics);
 Tumor Biology; Reproductive System (Reproduction)
INDEX TERMS:
 Parts, Structures, & Systems of Organisms
 breast: reproductive system
INDEX TERMS:
 Diseases
 breast cancer: neoplastic disease, reproductive system disease/female, diagnosis
 Breast Neoplasms (MeSH)
INDEX TERMS:
 Chemicals & Biochemicals
 p53; bcl-2; Bcl-2 protein family; bcl-xl; bad; bid;
 mcl-1; coenzyme Q 10; bak protein; caspase 3 [EC 3.4.22.56]; caspase 9 [EC 3.4.22.62]; caspase 6 [EC 3.4.22.59]
INDEX TERMS:
 Methods & Equipment
 cancer therapy: therapeutic and prophylactic techniques, clinical techniques; Western blot analysis: laboratory techniques, genetic techniques
INDEX TERMS:
 Miscellaneous Descriptors
 apoptosis; programmed cell death
ORGANISM:
 Classifier
 Hominidae 86215
 Super Taxa
 Primates; Mammalia; Vertebrata; Chordata; Animalia
 Organism Name
 human (common)
 Sk-Br-3 cell line (cell_line): human breast carcinoma cells
 MCF 7 cell line (cell_line): human breast carcinoma cells
 Taxa Notes
 Animals, Chordates, Humans, Mammals, Primates, Vertebrates
REGISTRY NUMBER:
 303-98-0 (coenzyme Q 10)
 169592-56-7 (caspase 3)
 169592-56-7 (EC 3.4.22.56)
 180189-96-2 (caspase 9)
 180189-96-2 (EC 3.4.22.62)
 182372-15-2 (caspase 6)
 182372-15-2 (EC 3.4.22.59)

L87 ANSWER 36 OF 37 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on
 STN
ACCESSION NUMBER: 2008:486091 BIOSIS Full-text
DOCUMENT NUMBER: PREV200800486090
TITLE: Induction of p53 by Coenzyme Q10 via modulation of mdm2 and p14.
AUTHOR(S): Persaud, Indushekhar [Reprint Author]; Lindley, Linsey; Sloan, Alexis J.; McCook, John P.; Narain, Niven R.
CORPORATE SOURCE: Univ Miami, Sch Med, Miami, FL USA
SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (APR 2008) Vol. 49, pp. 428.
 Meeting Info.: 99th Annual Meeting of the American-Association-for-Cancer-Research. San Diego, CA, USA. April 12 -16, 2008. Amer Assoc Canc Res.

10/597378

DOCUMENT TYPE: ISSN: 0197-016X.
Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 3 Sep 2008
Last Updated on STN: 3 Sep 2008

CONCEPT CODE: General biology - Symposia, transactions and proceedings
00520
Cytology - Human 02508
Biochemistry studies - Proteins, peptides and amino acids
10064
Enzymes - General and comparative studies: coenzymes
10802
Pathology - Therapy 12512
Neoplasms - Pathology, clinical aspects and systemic
effects 24004
Neoplasms - Therapeutic agents and therapy 24008

INDEX TERMS: Major Concepts
Enzymology (Biochemistry and Molecular Biophysics);
Tumor Biology

INDEX TERMS: Diseases
tumor: neoplastic disease, drug therapy
Neoplasms (MeSH)

INDEX TERMS: Chemicals & Biochemicals
Bcl-2: expression; p53: expression; mdm2: expression;
coenzyme Q10: antineoplastic-drug; p14ARF:
expression; caspase-3 [EC 3.4.22.56]: expression

INDEX TERMS: Methods & Equipment
Western blot analysis: laboratory techniques, genetic
techniques

ORGANISM: Classifier
Hominidae 86215
Super Taxa
Primates; Mammalia; Vertebrata; Chordata; Animalia
Organism Name
SK MEL-28 cell line (cell_line): human melanoma cells
Taxa Notes
Animals, Chordates, Humans, Mammals, Primates,
Vertebrates

REGISTRY NUMBER: 303-98-0 (coenzyme Q10)
169592-56-7 (caspase-3)
169592-56-7 (EC 3.4.22.56)

L87 ANSWER 37 OF 37 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on
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ACCESSION NUMBER: 2005:406013 BIOSIS Full-text
DOCUMENT NUMBER: PREV200510197832

TITLE: Coenzyme Q10 enhances the proliferation and migration of
fibroblasts and keratinocytes: a possible implication for
wound healing.

AUTHOR(S): Woan, K. V. [Reprint Author]; Narain, N. R.; Persaud,
I.; Ricotti, C. A.; Panchal, R. J.; Russell, K. J.;
Malik, L. H.; Li, J.; Hsia, S. L.

CORPORATE SOURCE: Univ Miami, Miller Sch Med, Miami, FL 33152 USA
SOURCE: Journal of Investigative Dermatology, (APR 2005) Vol. 124,
No. 4, Suppl. S, pp. A57.
Meeting Info.: 66th Annual Meeting of the
Society-for-Investigative-Dermatology. St Louis, MO, USA.
May 04 -07, 2005. Soc Investigat Dermatol.
CODEN: JIDEAE. ISSN: 0022-202X.

DOCUMENT TYPE: Conference; (Meeting)
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 12 Oct 2005
Last Updated on STN: 12 Oct 2005

CONCEPT CODE: General biology - Symposia, transactions and proceedings
00520
Cytology - General 02502
Cytology - Animal 02506
Biochemistry studies - Nucleic acids, purines and
pyrimidines 10062
Integumentary system - Physiology and biochemistry 18504

INDEX TERMS: Major Concepts
Integumentary System (Chemical Coordination and
Homeostasis); Cell Biology

INDEX TERMS: Parts, Structures, & Systems of Organisms
skin: integumentary system; mitochondria; keratinocyte;
integumentary system, migration, proliferation;
fibroblast, migration, proliferation

INDEX TERMS: Chemicals & Biochemicals
coenzyme Q10: potent antioxidant, effect; ATP:
production, oxidative phosphorylation

INDEX TERMS: Miscellaneous Descriptors
apoptosis; wound healing; cell protection

REGISTRY NUMBER: 303-98-0 (coenzyme Q10)
111839-44-2 (ATP)

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DICTIONARY FILE UPDATES: 28 MAR 2010 HIGHEST RN 1214990-69-8

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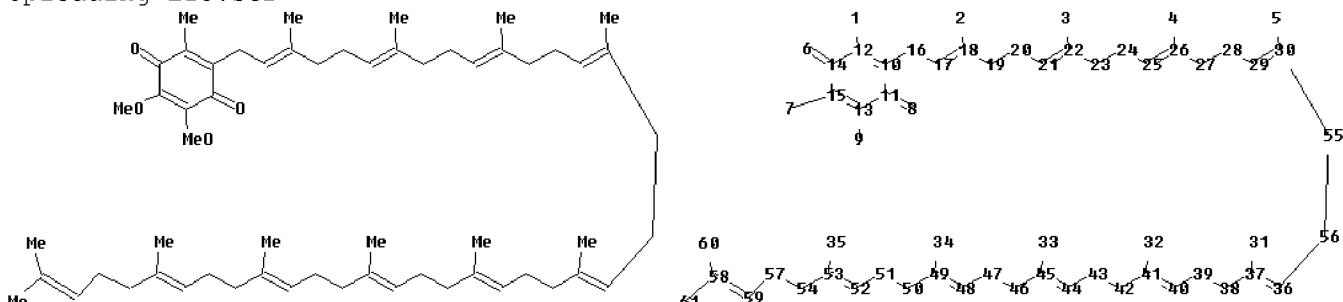
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chain nodes :

1	2	3	4	5	6	7	8	9	16	17	18	19	20	21	22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50		
51	52	53	54																			
55	56	57	58	59	60	61																

ring nodes :

10	11	12	13	14	15
----	----	----	----	----	----

chain bonds :

1-12	2-18	3-22	4-26	5-30	6-14	7-15	8-11	9-13	10-16	16-17	17-18	18-19
19-20	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-55	

31-37 32-41

33-45	34-49	35-53	36-37	36-56	37-38	38-39	39-40	40-41	41-42	42-43	43-44
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

44-45	45-46	46-47
-------	-------	-------

47-48	48-49	49-50	50-51	51-52	52-53	53-54	54-57	55-56	57-59	58-59	58-60
-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------	-------

58-61

ring bonds :

10-11	10-12	11-13	12-14	13-15	14-15
-------	-------	-------	-------	-------	-------

exact/norm bonds :

6-14	8-11	10-11	10-12	11-13	12-14	13-15	14-15
------	------	-------	-------	-------	-------	-------	-------

exact bonds :

10/597378

1-12	2-18	3-22	4-26	5-30	7-15	9-13	10-16	16-17	17-18	18-19	19-20	20-21
21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	30-55	31-37	32-41	
33-45	34-49											
35-53	36-37	36-56	37-38	38-39	39-40	40-41	41-42	42-43	43-44	44-45	45-46	
46-47	47-48											
48-49	49-50	50-51	51-52	52-53	53-54	54-57	55-56	57-59	58-59	58-60	58-61	

Match level :

1:CLASS	2:CLASS	3:CLASS	4:CLASS	5:CLASS	6:CLASS	7:CLASS	8:CLASS	9:CLASS
10:Atom	11:Atom	12:Atom	13:Atom	14:Atom	15:Atom	16:CLASS	17:CLASS	18:CLASS
19:CLASS	20:CLASS							
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29:CLASS	30:CLASS							
31:CLASS	32:CLASS	33:CLASS	34:CLASS	35:CLASS	36:CLASS	37:CLASS	38:CLASS	
39:CLASS	40:CLASS							
41:CLASS	42:CLASS	43:CLASS	44:CLASS	45:CLASS	46:CLASS	47:CLASS	48:CLASS	
49:CLASS	50:CLASS							
51:CLASS	52:CLASS	53:CLASS	54:CLASS	55:CLASS	56:CLASS	57:CLASS	58:CLASS	
59:CLASS	60:CLASS							
61:CLASS								

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USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

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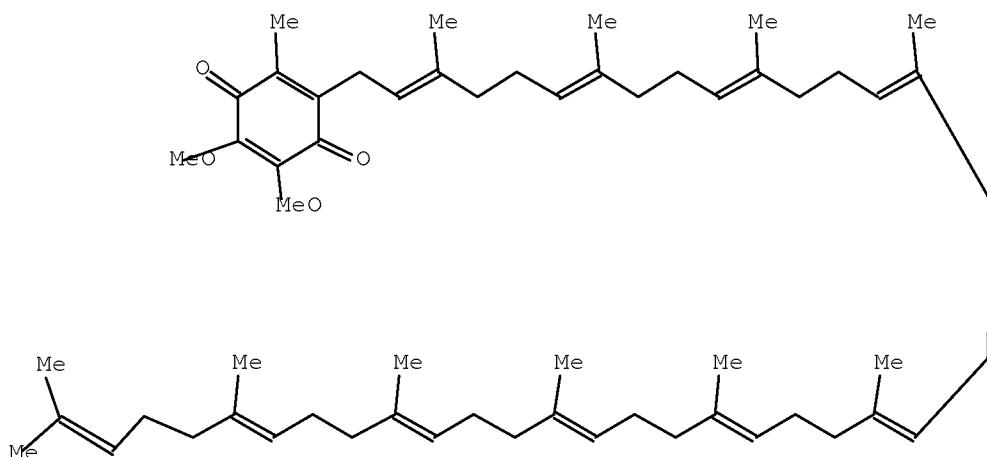
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=> d stat que L37



Structure attributes must be viewed using STN Express query preparation.

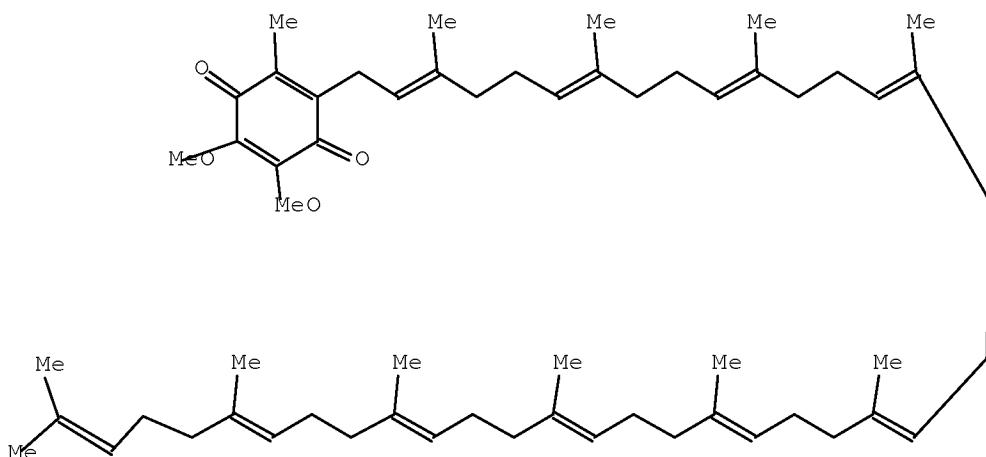
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 L21 2380 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON L17 (L) (THU OR DMA
 OR BAC OR PKT OR PAC OR FFD)/RL
 L22 139854 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON (?LEUKEM?/BI OR
 ?LEUKEM?/BI)
 L23 502215 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON ?CANCER?/BI
 L24 781886 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON ?TUMOUR?/BI OR
 ?TUMOR?/BI
 L25 62114 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON ?SARCOMA?/BI
 L26 645501 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON ?NEOPLAS?/BI
 L27 360843 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON ?CARCINO?/BI
 L28 28213 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON ?MYELOM?/BI
 L29 52342 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON ?LYMPHOMA?/BI
 L30 46413 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON ?MELANOM?/BI
 L31 66132 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON ?ANGIOGEN?/BI
 L32 200452 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON CELL PROLIFER?/BI
 L33 311 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON L21 AND (L22 OR L23
 OR L24 OR L25 OR L26 OR L27 OR L28 OR L29 OR L30 OR L31 OR
 L32)
 L34 123 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON L33 AND P/DT AND
 (PRD<20050121 OR PD<20050121 OR AD<20050121)
 L35 166 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON L33 AND PY<2006
 L36 183 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON (L34 OR L35)
 L37 30 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON L36 AND ?TOPICAL?/BI

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L17 83 SEA FILE=REGISTRY FAM FUL L15
 L22 139854 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON (?LEUKAEM?/BI OR
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 L23 502215 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON ?CANCER?/BI
 L24 781886 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON ?TUMOUR?/BI OR
 ?TUMOR?/BI
 L25 62114 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON ?SARCOMA?/BI
 L26 645501 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON ?NEOPLAS?/BI
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 L31 66132 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON ?ANGIOGEN?/BI
 L32 200452 SEA FILE=ZCPLUS SPE=ON ABB=ON PLU=ON CELL PROLIFER?/BI
 L38 SEL PLU=ON L17 1- CHEM : 120 TERMS
 L39 10721 SEA L38
 L40 1098 SEA L39 AND (L22 OR L23 OR L24 OR L25 OR L26 OR L27 OR L28 OR
 L29 OR L30 OR L31 OR L32)
 L41 34 SEA L40 AND ?TOPICAL?
 L79 11 SEA L41 AND PY<2006

=> dup rem L37 L79

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 PROCESSING COMPLETED FOR L37
 PROCESSING COMPLETED FOR L79
 L88 41 DUP REM L37 L79 (0 DUPLICATES REMOVED)

ANSWERS '1-30' FROM FILE ZCPLUS
 ANSWERS '31-37' FROM FILE EMBASE
 ANSWERS '38-41' FROM FILE BIOSIS

=> d ibib abs hitind hitstr L88 1-30; d iall L88 31-41

L88 ANSWER 1 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2008:529977 ZCPLUS Full-text
 DOCUMENT NUMBER: 148:479925
 TITLE: Liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low density lipoprotein, in ameliorating vascular diseases
 INVENTOR(S): Guilford, Timothy F.; Schumm, Brooke
 PATENT ASSIGNEE(S): USA
 SOURCE: PCT Int. Appl., 63pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 7
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008052184	A1	20080502	WO 2007-US82718	20071026
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 20070065497	A1	20070322	US 2005-230277	20050920
US 20060099244	A1	20060511	US 2005-163979	20051106 <--
PRIORITY APPLN. INFO.:			US 2005-230277	A2 20050920
			US 2005-163979	A2 20051106
			US 2006-863015P	P 20061026
			US 2004-522785P	P 20041107 <--
			US 2005-597041P	P 20051106

AB The invention proposes the use of reduced glutathione in a liposome (liposomal reduced glutathione) in form usable i.v., orally, dermally or mucosally, for administration of a therapeutically effective amount to ameliorate the progression of vascular disease, including atherosclerosis, diabetes, hypertension, narrowing of arteries leading to decreased blood flow, ischemic events, and the formation of blood clots, abnormal platelet aggregation, and thrombotic events, by reducing the amount and effect of oxidized cholesterol, oxidized HDL and oxidized LDL. The invention also proposes combining liposomal encapsulated glutathione with statin drugs to improve the effect of lowering not only cholesterol but also the oxidized cholesterol as well as oxidized HDL and oxidized LDL. The invention proposes a combination with a nitrous oxide enhancing substance such as arginine or lysine. The invention also proposes combining liposomal encapsulated glutathione with CoQ10 and other hypertensive treatment drugs such as lisinopril and ACE inhibitors as a therapy for vascular disease and management of side effects of statin therapy.

Thus, a 60 yr old woman, with diabetes requiring insulin therapy also has a long history of elevated blood pressure, previously controlled using lisinopril 20 mg. Upon blood pressure further increase, she was started on one l-arginine 450 mg per capsule in combination with 800 mg liposomal glutathione in its liquid form; the next day her blood pressure was 130/74. The dose of lisinopril was lowered to 20 mg once a day; continuing the arginine and liposomal glutathione, the blood pressure remains stable at 130/74.

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1

IT Platelet aggregation

(abnormal; liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT Fatigue, biological

(chronic fatigue syndrome; liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT Mucuna pruriens

Withania somnifera

(extract; liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT Infusion drug delivery systems

(i.v. infusions; liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT Pharmaceutical injections

(i.v. injections; liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT Sexual disorders

(impotence; liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT Lipid peroxidation

Oxidation

(inhibition; liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT Amnesia

Angiotensin-converting enzyme inhibitors

Anticholesteremic agents

Antihypertensives

Atherosclerosis

Combination chemotherapy

Diabetes mellitus

Dyspnea

HMG-CoA reductase inhibitors

Human

Hypertension

Ischemia

Mucosal drug delivery systems

Myalgia

Oral drug delivery systems
Pharmaceutical liposomes
Prostate gland, neoplasm
Thrombosis
 Topical drug delivery systems
Vascular disease
 (liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT Phosphatidylcholines
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT Encapsulation
 (nanoencapsulation; liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT Nerve, disease
 (neuropathy; liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT High-density lipoproteins
Low-density lipoproteins
RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process)
 (oxidized; liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT Low-density lipoproteins
RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (oxidation; liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT Drug interactions
 (synergistic; liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT 9015-82-1 9028-35-7
RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors; liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT 10024-97-2, Nitrous oxide, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT 56-81-5, Glycerine, biological studies 56-87-1, Lysine, biological studies 70-18-8, Reduced glutathione, biological studies 74-79-3, L-Arginine, biological studies 146-48-5, Yohimbine 303-98-0,

10/597378

CoQ10 7782-49-2, Selenium, biological studies 24634-61-5, Potassium sorbate 75330-75-5, Lovastatin 76547-98-3, Lisinopril 79902-63-9, Simvastatin 81093-37-0, Pravastatin 93957-54-1, Fluvastatin 134523-00-5, Atorvastatin 287714-41-4, Rosuvastatin

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT 57-88-5, Cholesterol, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(oxidation; liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

IT 303-98-0, CoQ10

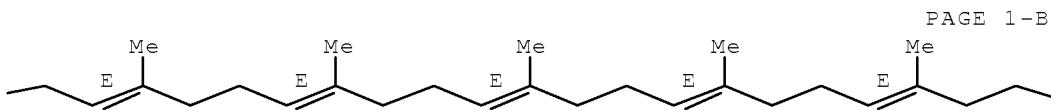
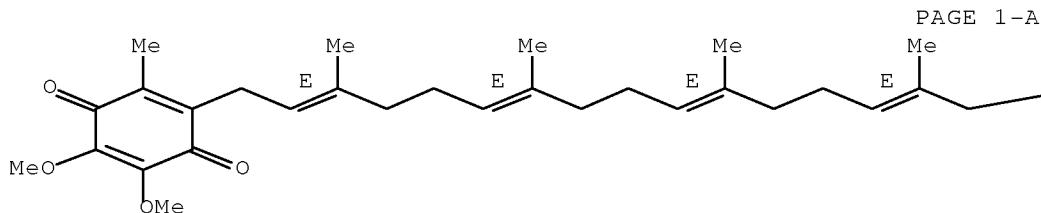
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(liposomally encapsulated reduced glutathione, combined with other drugs, for oral, topical, or transmucosal administration, for prevention of oxidation of cholesterol and of low d. lipoprotein, in ameliorating vascular diseases)

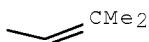
RN 303-98-0 ZCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



REFERENCE COUNT:

7

THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 2 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2008:978432 ZCPLUS Full-text
 DOCUMENT NUMBER: 149:259457
 TITLE: Method of cancer screening; method of cancer treatment; and method of auto-immune disease treatment
 INVENTOR(S): Woodward, John R.
 PATENT ASSIGNEE(S): Les Medecins L.P., USA
 SOURCE: U.S. Pat. Appl. Publ., 14 pp., Cont.-in-part of U.S. Ser. No. 533,805.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 7
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20080193482	A1	20080814	US 2008-100089	20080409 <--
US 20060063211	A1	20060323	US 2004-946213	20040921 <--
US 20060063212	A1	20060323	US 2004-3293	20041203 <--
US 20060062755	A1	20060323	US 2005-32399	20050110 <--
US 20060062757	A1	20060323	US 2005-133838	20050519 <--
US 7125836	B2	20061024		
US 20070014821	A1	20070118	US 2006-533805	20060921 <--
US 7507703	B2	20090324		
PRIORITY APPLN. INFO.:			US 2004-946213	B2 20040921 <--
			US 2004-3293	B2 20041203 <--
			US 2005-32399	B3 20050110 <--
			US 2005-133838	A1 20050519
			US 2006-533805	A2 20060921

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A method of cancer screening comprising the steps of administering the Blood CA 27,29 testing procedure; if the result is pos. administering a mammogram; if the result is pos. administering a needle biopsy; if the result is pos. administering a PET scan; if the result is pos. administering a blood tumor cell count. If all of the foregoing steps are pos., the cancer is treated by selecting one or more treatments from a group of provided treatment according to the patient's body and condition. A method of treating auto-immune diseases comprises selecting one or more treatments from another group of provided treatments, the one or more treatments selected and administered according to the patient's body and condition.

INCL 424227100; 424009200; 424184100

CC 1-6 (Pharmacology)

Section cross-reference(s): 2, 9, 14, 15, 63

ST breast cancer screening Blood CA2729 test mammogram needle biopsy; PET scan blood tumor cell count breast cancer screening; cancer autoimmune disease multiple treatment selection

IT Immune system

(BCG vaccine and imiquimod cream for stimulation of T-cells and; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

IT T cell

(BCG vaccine and imiquimod cream for stimulation of; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

IT Blood analysis

(Blood CA 27,29 test or tumor cell count; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

- IT Natural products, pharmaceutical
 - (GinSeng, in Q-base cream; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Vaccines
 - (Mycobacterium BCG; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Imaging
 - (NMR; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Fats and Glyceridic oils
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(almond, bitter almond kernel oil, in H base cream; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Almond
 - (bitter, kernel oil, in H base cream; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Antidiabetic agents
 - Antioxidants
 - Antitumor agents
 - Autoimmune disease
 - Combination chemotherapy
 - Human
 - Mammary gland, neoplasm
 - Neoplasm
 - Oral drug delivery systems
 - Pharmaceutical capsules
 - Pharmaceutical creams
 - Pharmaceutical tablets
 - Positron-emission tomography
 - Therapy
 - Tomography
 - Topical drug delivery systems
 - Transdermal drug delivery systems
 - (cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

- IT Diagnosis
- (cancer; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Cyclosiloxanes
- RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(di-Me, in Q-base cream; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Metastasis
- (diagnosis of; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Proteins
- RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(diet low in; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Exercise
- (directing plan for; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

- IT Mammary gland, neoplasm
 - (ductal carcinoma; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Ginkgo biloba
 - (extract of, in Q-base cream; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Fats and Glyceridic oils
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (fish, oral administration of tablets of; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Fats and Glyceridic oils
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (grape seed, in H base cream; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Tea products
 - (green, extract of, in Q-base cream; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Vaccines
 - (hepatitis B, recombinant hepatitis B, i.v. administration of; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Pharmaceutical injections
 - (i.v. injections; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Skin
 - (imiquimod-containing cream administration to various sites to avoid irritation to; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Aloe barbadensis
 - (in H base cream; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Canola oil
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (in H base cream; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Diabetes mellitus
 - (insulin-dependent; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT T cell
 - (killer T-cell, DHEA sulfate cream for attracting and activating; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Diet
 - (low protein; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Carcinoma
 - (mammary ductal; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Radiography

- (mammogram; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Controlled-release drug delivery systems
 - (oral, for niacin; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Fatty acids
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (polyunsatd., omega-3, oral administration of; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Hepatitis B virus
 - (recombinant, vaccine, i.v. administration of; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Mammary gland
 - (tissue needle biopsy; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Samples
 - (tissue; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Immunization
 - (vaccination; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Tumor necrosis factors
 - RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); BIOL (Biological study)
 - (vaccine inducing production of; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Mycobacterium BCG
 - (vaccine; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Fats and Glyceridic oils
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (wheat germ, in H base cream; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT Interferons
 - RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); BIOL (Biological study)
 - (α , induction of production of; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT 168273-06-1, Rimonabant
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (Acomplia, oral administration of; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT 59-67-6, Niacin, biological studies
 - RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (Niaspan, oral administration of extended release form of; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)
- IT 50-99-7, D-Glucose, biological studies 62572-11-6, Hemoglobin A1c
 - RL: ANT (Analyte); BSU (Biological study, unclassified); DGN (Diagnostic

use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

IT 36282-47-0, ULTRAM ER
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

IT 150977-36-9, Bromelain
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (capsules of; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

IT 56-81-5, Glycerin, biological studies 57-11-4, Stearic acid, biological studies 57-55-6, Propylene glycol, biological studies 58-95-7, Vitamin E acetate 64-02-8, Tetrasodium EDTA 79-81-2, Vitamin A palmitate 102-71-6, Triethanolamine, biological studies 1327-43-1, Magnesium aluminum silicate 7732-18-5, Water, biological studies 9004-99-3, PEG stearate 9005-67-8, Polysorbate 60 9006-65-9, Dimethicone 11099-07-3, Glyceryl stearate 11138-66-2, Xanthan gum 24634-61-5, Potassium sorbate 36653-82-4, Cetyl alcohol 64296-33-9, Vitamin C palmitate 78491-02-8, Diazolidinylurea
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (in H base cream; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

IT 50-70-4, Sorbitol, biological studies 112-92-5, Stearyl alcohol 139-33-3, Eddate disodium 541-02-6, Cyclopentasiloxane 6829-55-6D, Tocotrienol, compds. 22047-49-0, Octyl stearate 55965-84-9 84750-06-1, Arlacel 165 314241-95-7, Dow Corning 5225C
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (in Q-base cream; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

IT 124832-27-5, VALTREX
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (oral administration of combination of tramadol and; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

IT 861006-80-6, Lovaza
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (oral administration of tablets of; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

IT 303-98-0, Coenzyme Q10 443-48-1, FLAGYL 1783-84-2 9001-00-7 32222-06-3, Calcitriol 161973-10-0, NEXium 174882-69-0, Pycnogenol 186826-86-8, AVELOX
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (oral administration of; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

IT 119141-88-7, Esomeprazole 151096-09-2, Moxifloxacin
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (oral of; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

IT 53-43-0, DHEA 651-48-9, DHEA sulfate

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (topical administration of cream containing; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

IT 99011-02-6, Imiquimod

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (transdermal administration of cream containing; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

IT 506-26-3

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (γ -linolenic acid, oral administration of; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

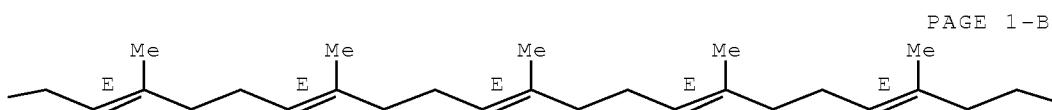
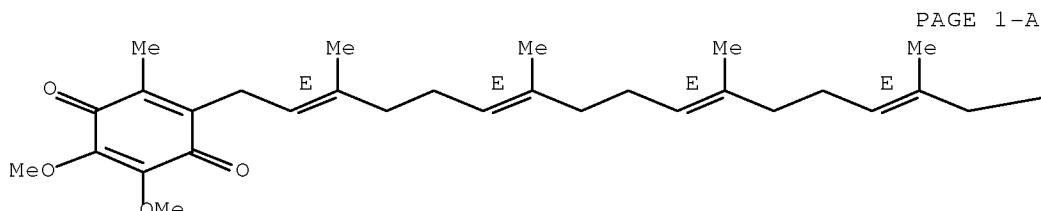
IT 303-98-0, Coenzyme Q10

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 (oral administration of; cancer screening, cancer treatment, and autoimmune disease treatment with selected multiple therapies)

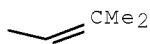
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CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



L88 ANSWER 3 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2008:349028 ZCPLUS Full-text
 DOCUMENT NUMBER: 148:338999
 TITLE: Foamable vehicle and vitamin and flavonoid pharmaceutical compositions thereof for treatment of skin and other disorders
 INVENTOR(S): Tamarkin, Dov; Friedman, Doron; Eini, Meir; Berman, Tal; Schuz, David
 PATENT ASSIGNEE(S): Foamix Ltd., Israel
 SOURCE: U.S. Pat. Appl. Publ., 57pp., Cont.-in-part of U.S. Ser. No. 430,599.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 35
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20080069779	A1	20080320	US 2007-900072	20070910 <--
US 20050031547	A1	20050210	US 2004-835505	20040428 <--
AU 2004313285	A1	20050929	AU 2004-313285	20041216 <--
ZA 2005007018	A	20080227	ZA 2005-7018	20041216 <--
US 20060275218	A1	20061207	US 2006-430599	20060509 <--
AU 2006298442	A1	20070412	AU 2006-298442	20060509
CA 2609953	A1	20070412	CA 2006-2609953	20060509
WO 2007039825	A2	20070412	WO 2006-IB3628	20060509
WO 2007039825	A3	20080306		
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AU 2006313443	A1	20070518	AU 2006-313443	20060509
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WO 2007054818	A2	20070518	WO 2006-IB3519	20060509
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EP 1888032	A2	20080220	EP 2006-831721	20060509
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EP 1893396	A2	20080305	EP 2006-809259	20060509
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
JP 2008540508	T	20081120	JP 2008-510676	20060509
JP 2008540511	T	20081120	JP 2008-510679	20060509
US 20070280891	A1	20071206	US 2006-645444	20061226 <--
ZA 2007010621	A	20090325	ZA 2007-10621	20070101
US 20080050317	A1	20080228	US 2007-894668	20070820 <--
MX 2007014106	A	20080829	MX 2007-14106	20071109
MX 2007014101	A	20090213	MX 2007-14101	20071109
IN 2007KN04432	A	20080125	IN 2007-KN4432	20071203
IN 2007KN04590	A	20080704	IN 2007-KN4590	20071203
ZA 2007010619	A	20090826	ZA 2007-10619	20071204
PRIORITY APPLN. INFO.:			US 2003-492385P	P 20030804 <--
			US 2003-530015P	P 20031216 <--
			US 2004-835505	A2 20040428 <--
			US 2005-679020P	P 20050509
			US 2006-784793P	P 20060321
			US 2006-430599	A2 20060509
			US 2006-843140P	P 20060908
			WO 2006-IB3519	W 20060509
			WO 2006-IB3628	W 20060509

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Vitamin and flavonoid containing compns. are provided that are stable to degradation. Stabilized compns. include one or more features including a hygroscopic solvent at a sufficient concentration to provide an Aw value of the hygroscopic vitamin and or flavonoid containing composition of less than 0.9, antioxidant flavonoids that are preferentially oxidized before the vitamin, preservatives, and hydrocarbon propellants selected to reduce the oxidation potential of the composition. Thus, a foamable carrier was prepared containing propylene glycol 88.00, stearyl alc. 2.00, hydroxypropyl cellulose 2.00, Laureth-4 2.00, GMS NE 2.00, macrogol cetostearyl ether 1.00, and PPG-15 stearyl ether 3.00%, resp. Ascorbic acid and niacinamide were concurrently added to the carrier at 5.00% and 2.00%, resp. Following addition of a propellant, the foamable composition was obtained, which upon release from an aerosol pressurized container afforded foam of good quality. The foam was easily spread and immediately absorbed into the facial skin with no extensive rubbing.

INCL 424045000

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1, 62

ST flavonoid vitamin topical foam microsponge skin disease

IT Alcohols

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(C16-18, ethoxylated, ethers; foamable vehicle for vitamin and
flavonoid topical compns. for treatment of skin and other
disorders)

IT Alcohols

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(C16-18, ethoxylated; foamable vehicle for vitamin and flavonoid
topical compns. for treatment of skin and other disorders)

IT Alcohols

Glycosides
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(C16-18; foamable vehicle for vitamin and flavonoid topical
compns. for treatment of skin and other disorders)

IT Glycerides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(C8-10; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Disease, animal
(Dercum disease; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
(Hailey-Hailey disease; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Sarcoma
(Kaposi's; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Reproductive system, neoplasm
Viral infection
(acuminate wart; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Wart
(acuminate; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Lymph node disease
(acute lymphangitis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Reproductive system disease
(adnexitis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
(aging; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Intestinal neoplasm
(anal; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Dandruff
(antidandruff agents; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Intestinal disease
(anus; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Dermatitis
(atopic; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
(bacterial infection; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Vaginal disease
(bacterial; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, neoplasm
(basal cell carcinoma; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Carcinoma
(basal cell; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Adhesives
(biol.; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
(bullous pemphigoid; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin
(callus; foamable vehicle for vitamin and flavonoid topical

compns. for treatment of skin and other disorders)

IT Foot
 (calluses and corns; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Vinyl compounds
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (carboxy-containing, polymers; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (carbuncle; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Inflammation
 (cellulitis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Sexually transmitted diseases
 (chancroid; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Ear disease
 (cholesteatoma; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Glycerides
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (coco; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Polyp
 (colon polyp; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Colon disease
 (colon polyps; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Dermatitis
 (contact; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (corn; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Injury
 Ulcer
 (cutaneous; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Pain
 (dermatol.; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Cyclosiloxanes
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (di-Me; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Carboxylic acids
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (dicarboxylic; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Oviduct
 (disease, salpingitis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Urethra
 (disease, urethritis, nongonococcal urethritis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Vaginal disease
 (dyspareunia; foamable vehicle for vitamin and flavonoid

topical compns. for treatment of skin and other disorders)

IT Cholesteatoma
(ear; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
(ecthyma; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
(epidermal necrolysis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
(erysipelas; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
(erythema nodosum; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
(erythrasma; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Fatty acids
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(essential; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Polyoxyalkylenes
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(ethers; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Vitamins
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fat-soluble; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Alcohols
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(fatty; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Intestinal disease
(fecal incontinence; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT AIDS (disease)

Abscess

Acaricides

Allergy inhibitors

Alopecia

Analgesics

Anthelmintics

Anti-infective agents

Anti-inflammatory agents

Antiaging cosmetics

Antibacterial agents

Antibiotics

Antidepressants

Antihistamines

Antimicrobial agents

Antioxidants

Antitumor agents

Antiviral agents

Astringents

Beeswax

Behcet's syndrome

Candidiasis

Cervix, neoplasm
Constipation
Crohn disease
Cytotoxic agents
Dermatitis
Dermatological agents
Disinfectants
Drugs
Ectodermal dysplasia
Eczema
Endometritis
Fungicides
Gelation agents
Hemorrhoid
Hepatitis B
Herpes
Honey
Human
Human papillomavirus
Hypolipemic agents
Immunomodulators
Immunosuppressants
Insect repellents
Insecticides
Lupus erythematosus
Lymphadenitis
Melanoma
Mycosis
Natural products, pharmaceutical
Nonsteroidal anti-inflammatory drugs
Oxidizing agents
Pharmaceutical foams
Photosensitizers, pharmaceutical
Preservatives
Propellants (sprays and foams)
Pruritus
Psoriasis
Purpura (disease)
Reproductive system, neoplasm
Rhus diversiloba
Rhus toxicodendron
Scar
Scleroderma
Skin, neoplasm
Stabilizing agents
Sunburn
Sunless tanning products
Surfactants
Topical drug delivery systems
Urticaria
Vagina, neoplasm
Vasoconstrictors
Vasodilators
Vitiligo
Wound healing promoters
(foamable vehicle for vitamin and flavonoid topical compns.
for treatment of skin and other disorders)

IT Alditol
Allergens
Anthocyanins

Carbohydrates
Carboxylic acids
Corticosteroids
Diglycerides
Disaccharides
Fatty acids
Flavanols
Flavones
Flavonoids
Gelatins
Glycols
Hormones, animal
Hydrocarbon oils
Lactams
Lanolin
Lecithins
Metals
Monoglycerides
Monosaccharides
Neuropeptides
Oligosaccharides
Ovalbumin
Oxides (inorganic)
Petrolatum
Polyamines
Polyoxyalkylenes
Proanthocyanidins
Retinoids
Vitamins
Waxes

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(foamable vehicle for vitamin and flavonoid topical compns.
for treatment of skin and other disorders)

IT Hair, disease
Inflammation
(folliculitis; foamable vehicle for vitamin and flavonoid topical
compns. for treatment of skin and other disorders)

IT Skin, disease
(furunculosis; foamable vehicle for vitamin and flavonoid topical
compns. for treatment of skin and other disorders)

IT Necrosis
(gangrene; foamable vehicle for vitamin and flavonoid topical
compns. for treatment of skin and other disorders)

IT Sexually transmitted diseases
(gonorrhea; foamable vehicle for vitamin and flavonoid topical
compns. for treatment of skin and other disorders)

IT Skin, disease
(granuloma annulare; foamable vehicle for vitamin and flavonoid topical
compns. for treatment of skin and other disorders)

IT Bacterial infection
(granuloma inguinale; foamable vehicle for vitamin and flavonoid topical
compns. for treatment of skin and other disorders)

IT Hair
(growth regulators; foamable vehicle for vitamin and flavonoid topical
compns. for treatment of skin and other disorders)

IT Feeding
Sweat
(gustatory sweating; foamable vehicle for vitamin and flavonoid topical
compns. for treatment of skin and other disorders)

IT Dermatitis

(herpetiformis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Disease, animal
 (hidradenitis suppurativa; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Castor oil
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (hydrogenated; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Solvents
 (hydrophilic; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Solvents
 (hydrophobic; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Fatty acids
 Flavones
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (hydroxy; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Sweat gland
 (hyperhidrosis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (ichthyosis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (impetigo; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Chlamydia
 Molluscum contagiosum virus
 (infection; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (injury; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Dermatological agents
 (keratolytics; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (lichen planus; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Anesthetics
 (local; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Lymph node disease
 (lymphogranuloma venereum; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Triglycerides
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (medium-chain; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Drug delivery systems
 (microsponges; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (miliaria; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Neoplasm
 (mole; foamable vehicle for vitamin and flavonoid topical

compns. for treatment of skin and other disorders)

IT Mycosis
 (moniliasis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Uterine cervicitis
 (mucopurulent cervicitis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Erythema
 (multiforme; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Joint disease
 (nail-patella syndrome; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (necrosis, ischemic necrosis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (necrotizing fasciitis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Myositis
 (necrotizing myositis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Ovarian disease
 (oophoritis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Flavonoids
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (oxo dihydro; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (pain; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Infection
 (paronychial; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Insecticides
 (pediculocides; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Parasitic infection
 (pediculosis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Body, anatomical
 (pelvis, inflammation; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (pemphigus; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin
 (permeation through; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Biological transport
 (permeation; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (photosensitivity; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Keratosis
 (pilaris; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (pityriasis rosea; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (pityriasis rubra pilaris; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Alcohols
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (polyhydric; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Hydrocarbons
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (propellants; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (rash; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Intestinal neoplasm
 (rectal polyp; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Intestinal disease
 (rectum; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Wart
 (removers; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (rosacea; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Connective tissue disease
 (s.c. necrotizing infection; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Inflammation
 (salpingitis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (scabies, scabicides; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Skin, disease
 (scalded skin syndrome; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Cydonia
 (seed extract; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Necrosis
 (skin, ischemic necrosis; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Caseins
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (sodium complexes; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Carcinoma
 (squamous cell; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Connective tissue
 (subcutaneous tissue, necrotizing infection; foamable vehicle for vitamin and flavonoid topical compns. for treatment of skin and other disorders)

IT Foot
 (toe, disease, corn; foamable vehicle for vitamin and flavonoid

topical compns. for treatment of skin and other disorders)

IT Cardiovascular agents
 (topical; foamable vehicle for vitamin and flavonoid
 topical compns. for treatment of skin and other disorders)

IT Sexually transmitted diseases
 (trichomoniasis; foamable vehicle for vitamin and flavonoid
 topical compns. for treatment of skin and other disorders)

IT Alcohols
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (trihydric; foamable vehicle for vitamin and flavonoid topical
 compns. for treatment of skin and other disorders)

IT Skin, disease
 (ulcer; foamable vehicle for vitamin and flavonoid topical
 compns. for treatment of skin and other disorders)

IT Inflammation
 (urethritis, nongonococcal urethritis; foamable vehicle for vitamin and
 flavonoid topical compns. for treatment of skin and other
 disorders)

IT Vaginal disease
 (vaginal dryness; foamable vehicle for vitamin and flavonoid
 topical compns. for treatment of skin and other disorders)

IT Acne
 (vulgaris; foamable vehicle for vitamin and flavonoid topical
 compns. for treatment of skin and other disorders)

IT Female reproductive system
 (vulva, neoplasm; foamable vehicle for vitamin and flavonoid
 topical compns. for treatment of skin and other disorders)

IT Reproductive system disease
 (vulvar dystrophy; foamable vehicle for vitamin and flavonoid
 topical compns. for treatment of skin and other disorders)

IT Reproductive system, neoplasm
 (vulvar intraepithelial neoplasia; foamable vehicle for
 vitamin and flavonoid topical compns. for treatment of skin
 and other disorders)

IT Reproductive system disease
 (vulvar; foamable vehicle for vitamin and flavonoid topical
 compns. for treatment of skin and other disorders)

IT Pain
 (vulvodynia; foamable vehicle for vitamin and flavonoid topical
 compns. for treatment of skin and other disorders)

IT Vitamins
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (water-soluble; foamable vehicle for vitamin and flavonoid topical
 compns. for treatment of skin and other disorders)

IT Skin
 (wrinkles; foamable vehicle for vitamin and flavonoid topical
 compns. for treatment of skin and other disorders)

IT 13157-90-9
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (Benzquercin; foamable vehicle for vitamin and flavonoid
 topical compns. for treatment of skin and other disorders)

IT 9005-00-9
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (Brij 721; foamable vehicle for vitamin and flavonoid topical
 compns. for treatment of skin and other disorders)

IT 9003-01-4D, crosslinked
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (Carbomer; foamable vehicle for vitamin and flavonoid topical
 compns. for treatment of skin and other disorders)

IT 30851-76-4

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (ethoxazorutoside; foamable vehicle for vitamin and flavonoid
 topical compns. for treatment of skin and other disorders)

IT 50-02-2, Dexamethasone 50-03-3, Hydrocortisone acetate 50-14-6,
 Vitamin D2 50-21-5, Lactic acid, biological studies 50-23-7,
 Hydrocortisone 50-24-8, Prednisolone 50-70-4D, Sorbitol, esters
 50-81-7, Vitamin C, biological studies 52-01-7, Spironolactone
 53-03-2, Prednisone 53-06-5, Cortisone 53-33-8, Paramethasone
 53-34-9, Fluprednisolone 53-36-1, Methylprednisolone acetate 56-47-3,
 Desoxycorticosterone acetate 56-81-5, Glycerin, biological studies
 57-13-6, Urea, biological studies 57-50-1D, Sucrose, esters 57-55-6,
 Propylene glycol, biological studies 57-83-0, Progesterone, biological
 studies 58-08-2, Caffeine, biological studies 58-85-5, Vitamin B7
 58-95-7, Tocopheryl acetate 59-02-9, α -Tocopherol 59-43-8,
 Vitamin B1, biological studies 59-67-6, Vitamin B5, biological studies
 60-00-4, EDTA, biological studies 60-29-7, Ether, biological studies
 67-68-5, Dimethyl sulfoxide, biological studies 67-73-2, Fluocinolone
 acetonide 67-97-0, Vitamin D3 68-04-2, Sodium citrate 68-19-9,
 Vitamin B12 68-26-8, Retinol 69-72-7, Salicylic acid, biological
 studies 76-25-5, Triamcinolone acetonide 76-47-1, Hydrocortamate
 79-14-1, Glycolic acid, biological studies 79-83-4, Vitamin B3
 81-13-0, Dexpanthenol 83-43-2, Methylprednisolone 83-88-5, Vitamin B2,
 biological studies 94-36-0, Benzoyl peroxide, biological studies
 97-99-4, Tetrahydrofurfuryl alcohol 98-92-0, Niacinamide 106-69-4,
 1,2,6-Hexanetriol 107-41-5, Hexylene glycol 110-27-0, Isopropyl
 myristate 111-46-6, Diethylene glycol, biological studies 112-27-6,
 Triethylene glycol 112-60-7, Tetraethylene glycol 112-72-1, Myristyl
 alcohol 112-92-5, Stearyl alcohol 117-39-5, Quercetin 123-31-9,
 Hydroquinone, biological studies 123-99-9, Azelaic acid, biological
 studies 124-94-7, Triamcinolone 126-30-7, Neopentyl glycol 127-19-5,
 Dimethylacetamide 127-31-1, Fludrocortisone 134-01-0, Peonidin
 134-04-3, Pelargonidin 137-58-6, Lidocaine 137-66-6, Ascorbyl
 palmitate 139-33-3 143-28-2, Oleyl alcohol 145-13-1, Pregnenolone
 150-13-0, PABA 152-58-9, Cortodoxone 152-97-6, Fluocortolone
 153-18-4, Rutin 154-23-4, Catechin 302-79-4, Retinoic acid
 303-98-0, Coenzyme Q 10 312-93-6, Dexamethasone phosphate
 356-12-7, Flucetonide 378-44-9, Betamethasone 382-67-2,
 Desoxymethasone 426-13-1, Fluorometholone 443-48-1, Metronidazole
 480-17-1, Leucocianidol 480-41-1, Naringenin 490-46-0, Epicatechin
 491-70-3, Luteolin 508-99-6, Hydrocortisone cyclopentylpropionate
 511-28-4, Vitamin D4 520-18-3, Kaempferol 520-27-4, Diosmin
 520-33-2, Hesperetin 520-36-5, Apigenin 520-91-2, Vitamin D1
 528-53-0, Delphinidin 528-58-5, Cyanidin 529-44-2, Myricetin
 552-58-9, Eriodictyol 616-45-5, Pyrrolidone 638-94-8, Desonide
 643-84-5, Malvidin 661-19-8, Behenyl alcohol 807-38-5, Fluocinolone
 872-50-4, N-Methyl-2-pyrrolidone, biological studies 970-73-0,
 Gallocatechin 970-74-1, Epigallocatechin 1247-42-3, Meprednisone
 1255-35-2, Fluprednidene acetate 1338-39-2, Sorbitan monolaurate
 1338-41-6, Span 60 1338-43-8, Sorbitan monooleate 1403-66-3,
 Gentamycin 1406-18-4, Vitamin E 1429-30-7, Petunidin 1524-88-5,
 Flurandrenolone acetonide 1569-02-4, Ethyl proxitol 2002-29-1,
 Flumethasone pivalate 2135-17-3, Flumethasone 2152-44-5, Betamethasone
 valerate 2163-42-0, 2-Methyl-1,3-propanediol 2668-66-8, Medrysone
 3068-00-6, 1,2,4-Butanetriol 3093-35-4, Halcinonide 3385-03-3,
 Flunisolide 3403-82-5, Dibutylene glycol 3693-39-8, Flucloronide
 3841-11-0, Fluperolone 3924-70-7, Amcinafal 4419-39-0, Beclomethasone
 4435-50-1, 1,2,3-Butanetriol 4828-27-7, Clorcortolone 5306-85-4,
 Dimethyl isosorbide 5534-09-8, Beclomethasone dipropionate 5593-20-4,
 Betamethasone dipropionate 6938-94-9, Disopropyl adipate 7008-26-6,
 Dichlorisone 7332-27-6, Amcinafide 7681-57-4 8014-04-8, Sharonmix

824 8059-24-3, Vitamin B6 9000-07-1, Carrageenan 9000-30-0, Guar gum 9000-30-0D, Guar gum, cationic derivs. 9000-40-2, Locust bean gum 9000-65-1, Tragacanth gum 9002-18-0, Agar 9002-85-1, Polyvinylidene chloride 9002-86-2, Polyvinyl chloride 9002-89-5, Polyvinyl alcohol 9002-92-0, Laureth 4 9003-01-4, Polyacrylic acid 9003-20-7, Polyvinyl acetate 9003-39-8, Polyvinylpyrrolidone 9004-30-2, Hydroxyethyl carboxymethyl cellulose 9004-32-4, Carboxymethyl cellulose 9004-61-9, Hyaluronic acid 9004-62-0, Hydroxyethyl cellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropyl methyl cellulose 9004-67-5, Methyl cellulose 9004-95-9, Polyoxyethylene cetyl ether 9004-99-3, Myrij 45 9005-25-8, Starch, biological studies 9005-32-7, Alginic acid 9005-38-3, Sodium alginate 9005-64-5 9005-65-6 9005-67-8 9007-16-3, Carbopol 934 9012-76-4, Chitosan 9032-42-2, Methylhydroxyethyl cellulose 9062-04-8, Carbopol 941 9087-61-0, Aluminum starch octenyl succinate 11070-67-0, Butynediol 11096-55-2, Vitamin B9 11099-07-3, Glyceryl stearate 11103-57-4, Vitamin A 11138-66-2, Xanthan gum 12001-79-5, Vitamin K 12542-32-4, Butenediol 13609-67-1, Hydrocortisone butyrate 14066-79-6, Chlorprednisone acetate 15307-86-5, Diclofenac 18323-44-9, Clindamycin 20283-92-5, Rosmarinic acid 22298-29-9, Betamethasone benzoate 23593-75-1, Clotrimazole 23674-86-4, Difluprednate 23869-24-1, Monoxerutin 25087-26-7, Polymethacrylic acid 25122-41-2, Clobetasol 25122-46-7, Clobetasol propionate 25122-57-0, Clobetasone butyrate 25231-21-4, PPG-15 stearyl ether 25265-71-8, Dipropylene glycol 25265-75-2, Butanediol 25322-68-3, Polyethylene glycol 25322-68-3D, fatty acid esters 25655-41-8, Povidone iodine 26762-52-7, Hexanediol 26762-67-4, Octanediol 27195-16-0, Sucrose distearate 29342-05-0, Ciclopirox 29348-79-6, Pentanediol 29468-36-8, Methyl hydroxybenzoate 31566-31-1, Glyceryl monostearate 33564-31-7, Diflorasone diacetate 34406-66-1 34513-50-3, Octyldodecanol 37318-31-3 37470-13-6 37870-43-2, Propyl hydroxybenzoate 39421-75-5, Hydroxypropyl guar gum 41767-29-7, Fluocortin butyl ester 51022-69-6, Amcinonide 51333-22-3, Budesonide 51395-75-6, Avicel RC 581 52080-57-6, Chloroprednisone 54063-32-0, Clobetasone 56451-84-4, Sorbitan stearate 57524-89-7, Hydrocortisone valerate 59198-70-8, Diflucortolone valerate 59277-89-3, Acyclovir 66734-13-2, Alclometasone dipropionate 68936-95-8, Methyl glucose sesquistearate 69364-63-2, Isoceteth-20 71761-06-3, Vitamin D5 76050-42-5, Carbopol 940 78628-80-5, Terbinafine hydrochloride 83919-23-7, Mometasone furoate 90566-53-3, Fluticasone 98651-66-2, Halobetasol 99011-02-6, Imiquimod 104987-11-3, Tacrolimus 108910-78-7, Magnesium ascorbyl phosphate 120146-89-6, Micro Sponge 138757-67-2, Carbopol 980 138757-68-3, Carbopol 981 145687-02-1, Pemulen TR 2 156410-05-8, Montanov 68
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (foamable vehicle for vitamin and flavonoid topical compns.
 for treatment of skin and other disorders)

IT 194674-18-5, Simulsol 165 827596-80-5 916451-60-0 952676-80-1
 1007319-03-0, Simusol 165 1011299-99-2
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (foamable vehicle for vitamin and flavonoid topical compns.
 for treatment of skin and other disorders)

IT 61641-74-5, Butane-propane mixture 102767-64-6, Propellant 1681
 1011493-08-5, Propellant 5515
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (propellant; foamable vehicle for vitamin and flavonoid topical
 compns. for treatment of skin and other disorders)

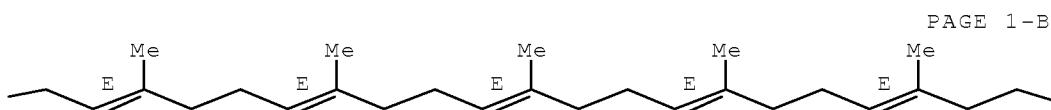
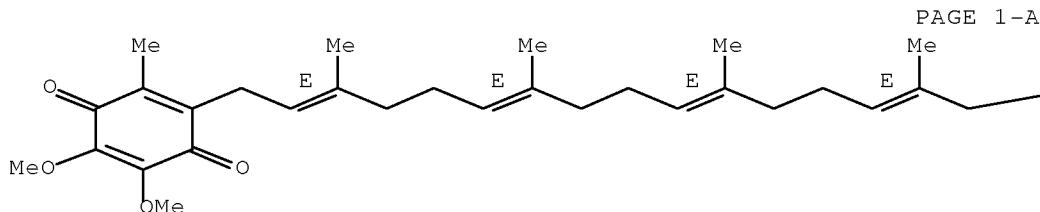
IT 303-98-0, Coenzyme Q 10
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (foamable vehicle for vitamin and flavonoid topical compns.
 for treatment of skin and other disorders)

10/597378

RN 303-98-0 ZCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-
3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-
tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C

DOS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
(2 CITINGS)

L88 ANSWER 4 OF 41 ZCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2007:1215784 ZCAPLUS Full-text
DOCUMENT NUMBER: 147:491621
TITLE: Nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone and method of
use for treatment/prevention of cancer
INVENTOR(S): Mazzio, Elizabeth; Soliman, Karam
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 31pp., Cont.-in-part of U.S.
Ser. No. 233,279.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070248693	A1	20071025	US 2007-711883	20070227 <--
US 20060035981	A1	20060216	US 2005-233279	20050920 <--

PRIORITY APPLN. INFO.: US 2003-491841P P 20030802 <--
 US 2004-540525P P 20040129 <--
 US 2004-909590 B2 20040802 <--
 US 2005-233279 A2 20050920

AB The invention describes a pharmaceutical composition and method for treating cancer comprising (a) 2,3-dimethoxy-5-methyl-1,4-benzoquinone, and/or (b) at least one of wild yam root, teasel root, balm of gilead bud, bakuchi seed, dichroa root, kochia seed, kanta kari, bushy knotweed rhizome, arjun, babul chalk bark, opopanax and bhumi amalaki; optionally one or more of frankincense, garcinia fruit, vitex, dragons blood, mace, sage and red sandalwood with at least (c) one compound capable of maximizing oxidative mitochondrial function, preferably riboflavin or vitamin B2 derivs., FAD, FMN, 5-amino-6-(5'-phosphoribitylamino)uracil, 6,7-dimethyl-8-(1-D-ribityl)lumazine, ribitol, 5,6-dimethylbenzimidazole, tetrahydrobiopterin, vitamin B1, lipoic acid, biotin, vitamin B6, vitamin B12, folate, niacin, vitamin C and pantothenate, and/or (d) at least one lactic acid dehydrogenase inhibitor, preferably 2',3,4'5,7-pentahydroxyflavone and optionally (f) an alkalizing agent (Aloe vera, chlorella, wheat grass, sodium or potassium bicarbonate, potassium), (g) an antiproliferative herb (speranskia or goldenseal), and (h) a pharmaceutically acceptable carrier. A method for inhibiting cancer optionally comprises one or more chemotherapy drug(s), selected, among others, from acetogenins, actinomycin D, adriamycin, aminoglutethimide, asparaginase, bleomycin, bullatacin, busulfan, carmustine, carboplatin, chlorambucil, cisplatin, etc. Thus, a composition comprised rosemary (Rosmarinus officinalis) .apprx.1000, myrrh gum (Commiphora molmol) .apprx.500, 2,3-dimethoxy-5-methyl-1,4 benzoquinone .apprx.800, and riboflavin .apprx.300 mg/day, resp.

INCL 42472500

CC 63-6 (Pharmaceuticals)
 Section cross-reference(s): 1, 17, 18

ST benzoquinone plant natural product nutraceutical cancer

IT Neoplasm
 (AIDS-related; nutraceutical composition comprising
 2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
 cancer)

IT Neuroglia, neoplasm
 (astrocytoma; nutraceutical composition comprising
 2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
 cancer)

IT Interferons
 Polyketides
 Quassinooids
 Steroids
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (combination with; nutraceutical composition comprising
 2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
 cancer)

IT Uterus, neoplasm
 (endometrium; nutraceutical composition comprising
 2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
 cancer)

IT Camellia sinensis
 (green; nutraceutical composition comprising
 2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
 cancer)

IT Commiphora molmol
 (gum; nutraceutical composition comprising
 2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
 cancer)

IT Neoplasm

(head and neck; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Beverages
(health; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Pharmaceutical injections
(i.a. injections; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Pharmaceutical injections
(i.m. injections; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Pharmaceutical injections
(i.p. injections; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Pharmaceutical injections
(i.v. injections; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Pharmaceutical injections
(intratumor; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Enzyme inhibitors
(lactic acid dehydrogenase inhibitors; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Respiration, animal
(mitochondrial, modulators; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Oxidative phosphorylation
(modulators; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Perfumes
(myrrh; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Astrocyte
(neoplasm, astrocytoma; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Connective tissue
(neoplasm; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Acacia nilotica
Acute lymphocytic leukemia
Acute myeloid leukemia
Adrenal gland, neoplasm
Aloe barbadensis
Antitumor agents
Bassia scoparia
Bile duct, neoplasm
Bladder, neoplasm

Bone neoplasm
Boswellia carterii
Brain, neoplasm
Bronchi, neoplasm
Burkitt lymphoma
 Carcinoma
Central nervous system, neoplasm
Cervix, neoplasm
Chlorella pyrenoidosa
Cinnamomum cassia
Colon neoplasm
Commiphora molmol
Coriandrum sativum
Cyamopsis tetragonolobus
Cytotoxic agents
Daemonorops draco
Dichroa febrifuga
Dietary supplements
Digestive tract, neoplasm
Dioscorea villosa
Dipsacus asper
Electrolytes
Enemas
Eye, neoplasm
Fallopia japonica
Gallbladder, neoplasm
Garcinia gummi-gutta
Glycyrrhiza glabra
Head and Neck, neoplasm
Health food
Hematopoietic neoplasm
Hodgkin's disease
Hydrastis canadensis
Hypothalamic neoplasm
Juglans nigra
Kidney, neoplasm
Liver, neoplasm
Lung, neoplasm
 Lymphoma
Mammary gland, neoplasm
Metastasis
Mouth, neoplasm
Myristica fragrans
Natural products, pharmaceutical
 Neoplasm
Neuroglia, neoplasm
Nose, neoplasm
Oral drug delivery systems
Ovary, neoplasm
Pancreas, neoplasm
Parathyroid gland, neoplasm
Parenteral drug delivery systems
Pharmaceutical aerosols
Pharmaceutical capsules
Pharmaceutical emulsions
Pharmaceutical foams
Pharmaceutical gels
Pharmaceutical granules
Pharmaceutical injections
Pharmaceutical liposomes

Pharmaceutical liquids
Pharmaceutical pastes
Pharmaceutical powders
Pharmaceutical solids
Pharmaceutical solutions
Pharmaceutical suppositories
Pharmaceutical suspensions
Pharmaceutical suspensions
Pharmaceutical tablets
Phyllanthus niruri
Pituitary gland, neoplasm
Populus balsamifera
Prophylaxis
Prostate gland, neoplasm
Pterocarpus santalinus
Rosmarinus officinalis
Salvia apiana
Skin, neoplasm
Solanum xanthocarpum
Speranskia tuberculata
Stomach, neoplasm
Syzygium aromaticum
Terminalia arjuna
Thyroid gland, neoplasm
Topical drug delivery systems
Triticum aestivum
Vitex agnus-castus
Wheat
Zingiber officinale
(nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Hydroquinones
Ubiquinones
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
study); USES (Uses)
(nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Resins
(opopanax; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Drug delivery systems
(packs; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Ubiquinones
RL: FFD (Food or feed use); THU (Therapeutic use); BIOL (Biological
study); USES (Uses)
(reduced; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Pharmaceutical injections
(s.c. injections; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

IT Body, anatomical
(sinus, neoplasm; nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of

cancer)

IT Pharmaceutical solutions
 (syrups; nutraceutical composition comprising
 2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
 cancer)

IT 50-18-0, Cyclophosphamide 50-28-2, Estradiol, biological studies
 50-44-2, Mercaptopurine 50-76-0, Actinomycin D 50-91-9, Flouxuridine
 51-21-8, Fluorouracil 51-75-2, Mechlorethamine 52-24-4, Thiopeta
 53-19-0, Mitotane 55-98-1, Busulfan 57-22-7, Vincristine 59-05-2,
 Methotrexate 125-84-8, Aminoglutethimide 127-07-1, Hydroxyurea
 147-94-4, Cytarabine 148-82-3, Melphalan 154-42-7, Thioguanine
 154-93-8, Carmustine 299-75-2, Treosulfan 305-03-3, Chlorambucil
 645-05-6, Hexamethylmelamine 671-16-9, Procarbazine 865-21-4,
 Vinblastine 1404-00-8, Mitomycin 1990-01-8, Glaucarubolone
 3778-73-2, Ifosfamide 4342-03-4, Dacarbazine 9015-68-3, Asparaginase
 10540-29-1, Tamoxifen 11056-06-7, Bleomycin 13010-47-4, Lomustine
 13311-84-7, Flutamide 13909-09-6, Semustine 15663-27-1, Cisplatin
 18378-89-7, Plicamycin 18883-66-4, Streptozocin 20830-81-3,
 Daunorubicin 21679-14-1, Fludarabine 23214-92-8, Doxorubicin
 24148-77-4, Simalikalactone A 25316-40-9, Adriamycin 29767-20-2,
 Teniposide 33069-62-4, Taxol 33419-42-0, Etoposide 41575-94-4,
 Carboplatin 53643-48-4, Vindesine 53714-56-0, Leuprolide 53910-25-1,
 Pentostatin 56420-45-2, Epirubicin 58957-92-9, Idarubicin
 61825-94-3, Oxaliplatin 65271-80-9, Mitozantrone 71486-22-1,
 Vinorelbine 95058-81-4, Gemcitabine 97682-44-5, Irinotecan
 112887-68-0, Tomudex 114977-28-5, Taxotere 123123-32-0, Bullatacin
 123948-87-8, Topotecan
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (combination with; nutraceutical composition comprising
 2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
 cancer)

IT 9001-60-9, Lactic acid dehydrogenase
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (inhibitors; nutraceutical composition comprising
 2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
 cancer)

IT 50-81-7, Vitamin C, biological studies 58-85-5, Biotin 59-30-3, Folic acid, biological studies 59-43-8, Vitamin B1, biological studies 59-67-6, Niacin, biological studies 60-18-4, Tyrosine, biological studies 63-91-2, Phenylalanine, biological studies 68-19-9, Vitamin B12 77-92-9, Citric acid, biological studies 79-83-4, Pantothenic acid 83-88-5, Riboflavin, biological studies 83-88-5D, Vitamin B2, derivs. and salts 99-96-7, biological studies 99-96-7D, p-Hydroxybenzoic acid, polyprenyl esters 117-39-5, Quercetin 144-55-8, Sodium bicarbonate, biological studies 146-14-5, Flavin-adenine dinucleotide 146-17-8, Flavin mononucleotide 156-39-8 298-14-6, Potassium bicarbonate 303-98-0, Ubiquinone 50 306-23-0 358-71-4 480-16-0, 2',3,4'5,7-Pentahydroxyflavone 488-81-3, Ribitol 582-60-5, 5,6-Dimethylbenzimidazole 605-94-7, 2,3-Dimethoxy-5-methyl-1,4-benzoquinone 989-51-5, Epigallocatechin gallate 1200-22-2, Lipoic acid 2382-48-1D, Ubichromenol, derivs. 2535-20-8 6703-77-1D, Ubichromanol, derivs. 7400-08-0 7440-09-7, Potassium, biological studies 8059-24-3, Vitamin B6 17528-72-2, Tetrahydrobiopterin 71491-01-5
 RL: FFD (Food or feed use); THU (Therapeutic use);
 BIOL (Biological study); USES (Uses)
 (nutraceutical composition comprising
 2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
 cancer)

IT 303-98-0, Ubiquinone 50

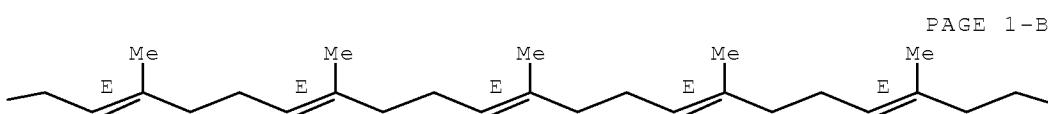
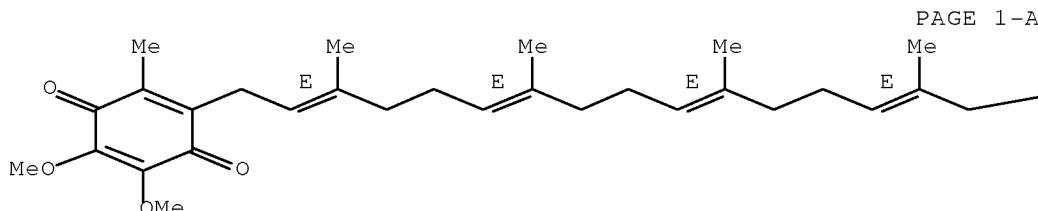
10/597378

RL: FFD (Food or feed use); THU (Therapeutic use);
BIOL (Biological study); USES (Uses)
(nutraceutical composition comprising
2,3-dimethoxy-5-methyl-1,4-benzoquinone for treatment/prevention of
cancer)

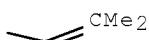
RN 303-98-0 ZCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-
3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-
tetraccontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



L88 ANSWER 5 OF 41 ZCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2006:544828 ZCAPLUS Full-text
DOCUMENT NUMBER: 145:33510
TITLE: Dermatological compositions using bio-activating
organocatalysts
INVENTOR(S): Eberl, James, J.
PATENT ASSIGNEE(S): Ebersytes, LLC, USA
SOURCE: PCT Int. Appl., 49 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006060548	A2	20060608	WO 2005-US43434	20051201 <--

WO 2006060548 A3 20070111
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
 CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR,
 KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX,
 MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,
 SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
 VN, YU, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
 CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
 GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
 KG, KZ, MD, RU, TJ, TM

US 20060120980 A1 20060608 US 2005-292227 20051201 <--
 PRIORITY APPLN. INFO.: US 2004-632479P P 20041202 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention provides novel dermatol. compns. and related methods useful in the activation of skin growth factors and growth receptors. Compns. of the invention act upon follicle cells and other skin targets to induce hair growth, facilitate dermal cell repair, and enhance skin health. Compns. comprise a bio-activating organocatalyst in a pharmaceutically acceptable carrier, adapter for use on an animal's skin or hair. Thus, a composition contained Eucerin Renewal 33.00, ascorbyl palmitate 1.60, Coenzyme Q 0.6, and soybean oil 1.15 g, and copper lactate 1.5 mL of a 1% solution

CC 62-4 (Essential Oils and Cosmetics)

Section cross-reference(s): 63

IT Acne

Antioxidants

Arnica

Brassica

Burn

Cardiovascular system, disease

Catalysts

Creosote

Drug delivery systems

Grindelia

Hair

Human

Irritants

Juniperus

Lytta vesicatoria

 Neoplasm

Populus

Redox agents

Skin

Surfactants

Tar oils

Thymus (plant)

Wound

Wound healing

 (dermatol. composition using bio-activating organocatalysts)

IT Drug delivery systems

 (topical; dermatol. composition using bio-activating organocatalysts)

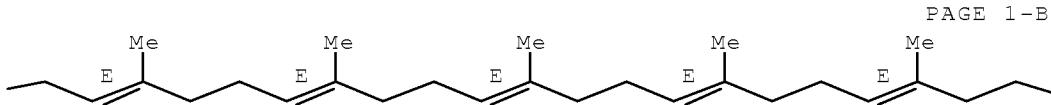
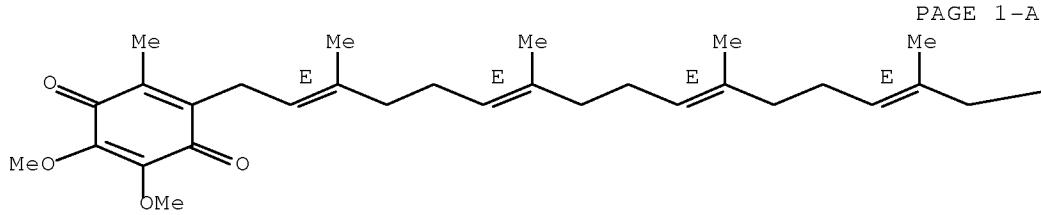
IT 50-21-5, Lactic acid, biological studies 50-81-7, L-Ascorbic acid, biological studies 52-90-4, Cysteine, biological studies 57-88-5, Cholest-5-en-3-ol (3 β)-, biological studies 59-67-6, Nicotinic acid, biological studies 60-87-7, Promethazine 64-17-5, Ethanol, biological studies 64-18-6, Formic acid, biological studies 67-63-0, 2-Propanol, biological studies 69-72-7, biological studies 69-93-2,

Uric acid, biological studies 70-18-8, Reduced glutathione, biological studies 74-31-7 76-22-2, Camphor 89-78-1, Menthol 89-83-8, Thymol 94-62-2, Piperine 102-29-4, Resorcinol monoacetate 108-46-3, Resorcinol, biological studies 117-39-5, Quercetin 128-37-0, Butylated hydroxytoluene, biological studies 134-03-2, Sodium ascorbate 137-66-6 149-91-7, Gallic acid, biological studies 153-18-4, Rutin 303-98-0 315-30-0 331-39-5, Caffeic acid 404-86-4, Capsaicin 462-20-4, Dihydrolipoic acid 470-82-6 476-66-4, Ellagic acid 491-58-7, Chrysarobin 499-75-2, Carvacrol 526-84-1 616-91-1, N-Acetylcysteine 992-78-9 1143-38-0, Anthralin 1200-22-2 1406-18-4, Vitamin E 1948-33-0 6027-13-0, L-Homocysteine 7439-89-6, Iron, biological studies 7439-96-5, Manganese, biological studies 7440-48-4, Cobalt, biological studies 7440-50-8, Copper, biological studies 8001-71-6, Chrysarobin 8029-68-3, Ichthammol 10597-60-1, Hydroxytyrosol 13870-80-9 15651-72-6 16039-52-4, Copper lactate 23288-49-5 23661-48-5 25013-16-5, Butylated hydroxyanisole 51395-10-9, Copper EDTA 53188-07-1 137865-26-0 805241-13-8, Eucerin Renewal
 RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

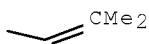
IT 303-98-0
 RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (dermatol. composition using bio-activating organocatalysts)

RN 303-98-0 ZCAPLUS
 CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
 (1 CITINGS)
 REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 6 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2006:238357 ZCPLUS Full-text
 DOCUMENT NUMBER: 144:318557
 TITLE: Preparation, compositions and uses of mixtures of polypeptides
 INVENTOR(S): Pinchasi, Irit; Dolitzky, Ben-Zion; Frenkel, Anton;
 Schwartz, Michal; Arnon, Ruth; Aharoni, Rina
 PATENT ASSIGNEE(S): Teva Pharmaceutical Industries, Ltd., Israel; Teva
 Pharmaceuticals USA, Inc.; Yeda Research and Development Co. Ltd.
 SOURCE: PCT Int. Appl., 197 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006029411	A2	20060316	WO 2005-US32553	20050909 <--
WO 2006029411	A3	20060803		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
US 20060122113	A1	20060608	US 2005-223408	20050909 <--
US 7560100	B2	20090714		
EP 1797109	A2	20070620	EP 2005-795337	20050909 <--
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
US 20070054857	A1	20070308	US 2006-541263	20060929 <--
PRIORITY APPLN. INFO.:			US 2004-608844P	P 20040909 <--
			US 2005-223408	A1 20050909
			WO 2005-US32553	W 20050909

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention provides a composition comprising a mixture of polypeptides, wherein each polypeptide (a) is a copolymer of the amino acids L-glutamic acid, L-alanine, L-tyrosine, and L-lysine, and (b) may be in the form of a pharmaceutically acceptable salt. In the mixture (i) the polypeptides have an average mol. weight in the range 13,500 to 18,500 daltons, (ii) 13% to 38% of the polypeptides have a diethylamide group instead of a carboxyl group present at one end thereof, and (iii) 68% of the polypeptides have a mol. weight between 7000 and 41,000 daltons. The average mol. weight of polypeptides is 16,000 daltons. Processes for preparing the mixture of polypeptides and its

therapeutic uses are described. For example, an injection formulation containing the polypeptide mixture 5 mg, mannitol 50 mg, and water for injection to 1.0 mL was prepared and packaged in Hypak syringe. Also, the biol. activity of preps. of different mol. weight (MW) was evaluated by their ability to block the induction of exptl. autoimmune encephalomyelitis (EAE) in mice by reducing the number of sick animals and lowering the severity of disease (clin. score). The results were compared to that of glatiramer acetate (GA). The effect of increase in MW on biol. activity was observed At the dose of 25 µg/mouse, GA blocking activity was suboptimal while preps. with MW ranging between 15 and 20 KDa were more effective in inhibiting acute EAE. At the dose of 50 µg/mouse, GA (7.5 daltons) was not effective in inhibiting chronic myelin oligodendrocyte glycoprotein (MOG)-induced EAE, while the mixture of polypeptides of the invention (.apprx. 16.0 KD) had a significant inhibitory effect.

CC 63-6 (Pharmaceuticals)
 Section cross-reference(s): 1
 IT Antibodies and Immunoglobulins
 Corticosteroids, biological studies
 Glucocorticoids
 Interferons
 Steroids, biological studies
 Tumor necrosis factors
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (therapeutic combinations containing mixts. of polypeptides comprising alanine, glutamic acid, lysine and tyrosine)
 IT Drug delivery systems
 (topical; preparation, compns. and therapeutic uses of mixts. of polypeptides comprising alanine, glutamic acid, lysine and tyrosine)
 IT 50-02-2, Dexamethasone 50-18-0, Cyclophosphamide 50-23-7,
 Hydrocortisone 50-24-8, Prednisolone 50-44-2, 6-Mercaptopurine
 50-47-5, Desipramine 50-48-6, Amitriptyline 50-49-7, Imipramine
 50-53-3, biological studies 50-55-5, Reserpine 50-81-7, Vitamin C,
 biological studies 51-34-3, Scopolamine 51-43-4, Epinephrine
 51-55-8, Atropine, biological studies 51-83-2, Carbachol 51-85-4,
 Cystamine 52-86-8, Haloperidol 53-03-2, Prednisone 54-85-3,
 Isoniazide 54-96-6, 3,4-Diaminopyridine 55-91-4, Isoflurophate
 56-81-5, Glycerin, biological studies 56-94-0 57-00-1, Creatine
 57-41-0, Phenytoin 58-38-8 58-73-1, Diphenhydramine 58-74-2,
 Papaverine 59-05-2, Methotrexate 59-30-3, Folic acid, biological
 studies 59-66-5, Acetazolamide 59-96-1, Phenoxybenzamine 67-20-9,
 Nitrofurantoin 68-88-2, Hydroxyzine 72-69-5, Nortriptyline 74-79-3,
 L-Arginine, biological studies 76-57-3, Codeine 79-43-6, biological
 studies 83-88-5, Riboflavin, biological studies 89-57-6,
 5-Aminosalicylic acid 92-13-7, Pilocarpine 92-84-2, Phenothiazine
 94-78-0, Phenazopyridine 98-92-0, Nicotinamide 99-20-7, Trehalose
 100-97-0, Methenamine, biological studies 101-31-5, Hyoscyamine
 113-53-1, Dothiepin 125-33-7, Primidone 130-95-0, Quinine 155-09-9,
 Tranylcypromine 298-46-4, Carbamazepine 298-50-0, Propantheline
 302-79-4, Retinoic acid 303-98-0, Coenzyme Q10 438-60-8,
 Protriptyline 439-14-5, Diazepam 443-48-1, Metronidazole 446-86-6,
 Azathioprine 495-40-9D, Butyrophenone, derivs. 504-24-5,
 4-Aminopyridine 523-87-5, Dimenhydrinate 541-15-1, Carnitine
 569-65-3, Meclizine 578-68-7D, 4-Aminoquinoline, derivs. 599-79-1,
 Sulfasalazine 603-50-9, Bisacodyl 745-65-3, Alprostadil 768-94-5,
 Amantadine 846-50-4, Temazepam 915-30-0, Diphenoxylate 1134-47-0,
 Baclofen 1200-22-2, Lipoic acid 1309-42-8, Magnesium hydroxide
 1406-16-2D, Vitamin D, derivs. 1406-18-4, Vitamin E 1622-61-3,
 Clonazepam 1668-19-5, Doxepin 2152-34-3, Pemoline 4205-90-7,
 Clonidine 4291-63-8, Cladribine 5633-20-5, Oxybutynin 6493-05-6,
 Pentoxifylline 7601-54-9, Sodium phosphate 7782-49-2, Selenium,

biological studies 8063-16-9, Psyllium mucilloid 10041-19-7, Docusate 10118-90-8, Minocycline 11000-17-2, Vasopressin 11103-57-4, Vitamin A 14605-22-2, Tauroursodeoxycholic acid 14663-23-1, Dantrolene sodium 15722-48-2, Olsalazine 16679-58-6, Desmopressin 18378-89-7, Mithramycin 19794-93-5, Trazodone 19982-08-2, Memantine 22664-55-7, Metipranolol 23047-25-8, Lofepramine 26921-17-5, Timolol maleate 28981-97-7, Alprazolam 30562-34-6, Geldanamycin 32222-06-3, Calcitriol 34911-55-2, Bupropion 36505-84-7, Buspirone 41294-56-8, Alphacalcidol 47141-42-4, Levobunolol 51322-75-9, Tizanidine 51781-06-7, Carteolol 52365-63-6, Dipivefrin 53123-88-9, Rapamycin 53179-11-6, Loperamide 54910-89-3, Fluoxetine 57308-51-7, Carbidopa-levodopa mixture 59277-89-3, Acyclovir 59729-33-8, Citalopram 59803-98-4, Brimonidine 59865-13-3, Cyclosporine 60142-96-3, Gabapentin 61869-08-7, Paroxetine 63590-64-7, Terazosin 63659-18-7, Betaxolol 65271-80-9, Mitoxantrone 66711-21-5, Apraclonidine 68291-97-4, Zonisamide 68693-11-8, Modafinil 71320-77-9, Moclobemide 79617-96-2, Sertraline 79902-63-9, Simvastatin 80573-04-2, Balsalazide 82626-48-0, Zolpidem 83366-66-9, Nefazodone 84057-84-1, Lamotrigine 85650-52-8, Mirtazapine 85721-33-1, Ciprofloxacin 91524-16-2, Timolol hemihydrate 93413-69-5, Venlafaxine 97240-79-4, Topiramate 107231-12-9, Botulinum toxin 107452-89-1, Ziconotide 119431-25-3, Eliprodil 120279-96-1, Dorzolamide 124937-51-5, Tolterodine 128298-28-2, Remacemide 130209-82-4, Latanoprost 136236-51-6, Rasagiline 138890-62-7, Brinzolamide 139755-83-2, Sildenafil 148553-50-8, Pregabalin 155206-00-1, Bimatoprost 157283-68-6, Travoprost 189261-10-7, Natalizumab 216503-57-0, Alemtuzumab 248281-84-7, Laquinimod

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(therapeutic combinations containing mixts. of polypeptides comprising alanine, glutamic acid, lysine and tyrosine)

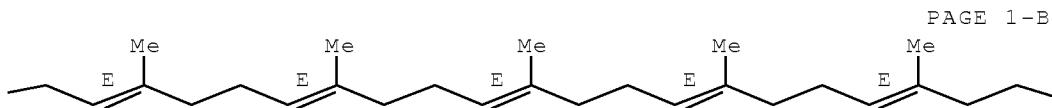
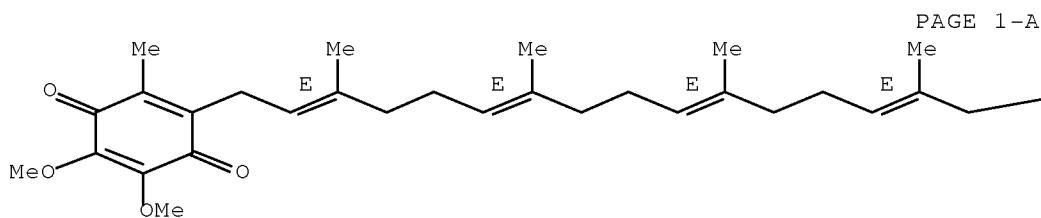
IT 303-98-0, Coenzyme Q10

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(therapeutic combinations containing mixts. of polypeptides comprising alanine, glutamic acid, lysine and tyrosine)

RN 303-98-0 ZCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



CMe2

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD
 (3 CITINGS)
 REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 7 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2006:365124 ZCPLUS Full-text
 DOCUMENT NUMBER: 144:398343
 TITLE: Methods and compositions for the treatment of diseases
 characterized by calcification and/or plaque formation
 INVENTOR(S): Kajander, E. Olavi; Aho, K.; Ciftcioglu, Neva;
 Millican, H. B.; Maniscalco, B.
 PATENT ASSIGNEE(S): Nanobac Pharmaceuticals, Inc., USA
 SOURCE: U.S. Pat. Appl. Publ., 14 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 20060083727	A1	20060420	US 2005-182076	20050715 <--
US 20070048296	A1	20070301	US 2006-544048	20061006 <--
PRIORITY APPLN. INFO.:			US 2004-587871P	P 20040715 <--
			US 2005-182076	A1 20050715

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention provides methods and compns. that include a nutraceutical supplement, antibiotic, and metal chelating agent that is administered to a patient to treat or prevent pathol. calcification and or plaque formation as associated with Nanobacteria Calcifying Nano-Particles and/or diseases caused there-from, The method includes the administration of a therapeutically effective nutraceutical supplement, tetracycline HCL, and EDTA calcium di-sodium salt to a patient in order to prevent and treat calcific disease.

INCL 424094100; 424094200; 424765000; 424766000; 514154000; 514566000;
 514052000; 514251000; 514276000; 514350000

CC 63-6 (Pharmaceuticals)

IT Ovary, neoplasm
 (adenocarcinoma, Serous; methods and compns. for treatment of diseases characterized by calcification and/or plaque formation)

IT Nervous system, neoplasm
 (meningioma; methods and compns. for treatment of diseases characterized by calcification and/or plaque formation)

IT Addison's disease
 Alzheimer's disease
 Anemia (disease)
 Anti-Alzheimer's agents
 Anti-infective agents
 Antiarteriosclerotics
 Antiarthritics

Antibiotics
Anticoagulants
Antidiabetic agents
Antiphospholipid syndrome
Antirheumatic agents
 Antitumor agents
Arteriosclerosis
Atherosclerosis
Autoimmune disease
Blood, disease
Calculi, biliary
Calculi, urinary
Cataract
Chelating agents
Cirrhosis
Curcuma longa
Ear, disease
Eczema
Eye, disease
Fruit and vegetable juices
Graves' disease
Hypothyroidism
Intestine, disease
Kidney
Liver, disease
Lupus erythematosus
Mammary gland, neoplasm
Multiple sclerosis
Osteoarthritis
Pancreas
Placenta, disease
Prostate gland, neoplasm
Psoriasis
Rheumatoid arthritis
Thrombosis
Thyroid gland, neoplasm
 (methods and compns. for treatment of diseases characterized by calcification and/or plaque formation)

IT Meninges
 (neoplasm, meningioma; methods and compns. for treatment of diseases characterized by calcification and/or plaque formation)

IT Angiogenesis
 (neovascularization, retinal, -derived processes; methods and compns. for treatment of diseases characterized by calcification and/or plaque formation)

IT Drug delivery systems
 (ointments, creams, topical; methods and compns. for treatment of diseases characterized by calcification and/or plaque formation)

IT Carcinoma
 (ovarian adenocarcinoma, Serous; methods and compns. for treatment of diseases characterized by calcification and/or plaque formation)

IT Drug delivery systems
 (topical, cream; methods and compns. for treatment of diseases characterized by calcification and/or plaque formation)

IT Neoplasm
 (treatment of; methods and compns. for treatment of diseases characterized by calcification and/or plaque formation)

IT 50-81-7, Vitamin C, biological studies 56-87-1, L-Lysine, biological

studies 57-62-5, Chlortetracycline 59-30-3, biological studies 59-43-8, Vitamin B1, biological studies 59-67-6, Niacin, biological studies 60-54-8, Tetracycline 64-75-5, Tetracycline hydrochloride 67-42-5, EGTA 67-43-6 67-71-0, Methyl sulfonyl methane 68-19-9, Vitamin B12 68-26-8, Vitamin A 70-26-8, L-Ornithine 74-79-3, L-Arginine, biological studies 79-57-2, Oxytetracycline 83-88-5, Vitamin B2, biological studies 117-39-5, Quercetin 127-33-3, Demeclocycline 303-98-0, Co-Q10 564-25-0, Doxycycline 751-97-3, Rolitetracycline 808-26-4, Sencycline 914-00-1, Methacycline 1406-18-4, Vitamin E 6381-92-6 7779-25-1, Magnesium citrate 7782-49-2, Selenium, biological studies 8059-24-3, Vitamin B6 9001-73-4, Papain 9002-07-7, Trypsin 9004-65-3, Hydroxypropyl methylcellulose 10118-90-8, Minocycline 11103-57-4, Vitamin A 85233-19-8, BAPTA 95975-55-6, Gugulipid 150977-36-9, Bromelain 174882-69-0, Pycnogenol

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. for treatment of diseases characterized by calcification and/or plaque formation)

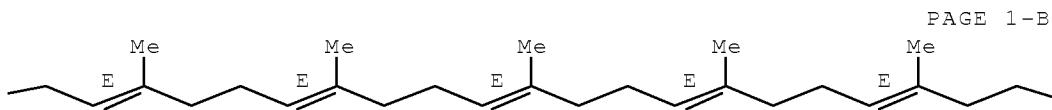
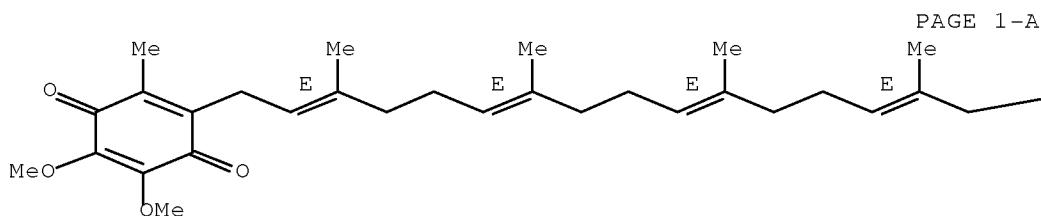
IT 303-98-0, Co-Q10

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(methods and compns. for treatment of diseases characterized by calcification and/or plaque formation)

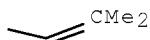
RN 303-98-0 ZCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



(1 CITINGS)

L88 ANSWER 8 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2005:696614 ZCPLUS Full-text
 DOCUMENT NUMBER: 143:159636
 TITLE: Topical Coenzyme Q10 formulations
 INVENTOR(S): Hsia, Sung Lan; Narain, Niven Rajin; Li, Jie; Russell, Kathryn J.; Woan, Karrune V.; Persaud, Indushekhar
 PATENT ASSIGNEE(S): University of Miami, USA
 SOURCE: PCT Int. Appl., 86 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005069916	A2	20050804	WO 2005-US1581	20050121 <--
WO 2005069916	A3	20061019		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, SM RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2005206953	A1	20050804	AU 2005-206953	20050121 <--
CA 2553690	A1	20050804	CA 2005-2553690	20050121 <--
EP 1718283	A2	20061108	EP 2005-711599	20050121 <--
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CN 1953743	A	20070425	CN 2005-80005626	20050121 <--
BR 2005007039	A	20070605	BR 2005-7039	20050121 <--
JP 2007518805	T	20070712	JP 2006-551208	20050121 <--
MX 2006008293	A	20070611	MX 2006-8293	20060721 <--
IN 2006KN02090	A	20070518	IN 2006-KN2090	20060725 <--
NO 2006003439	A	20061023	NO 2006-3439	20060726 <--
KR 2007012349	A	20070125	KR 2006-716800	20060822 <--
US 20080299100	A1	20081204	US 2008-597378	20080821 <--
PRIORITY APPLN. INFO.:			US 2004-538319P	P 20040122 <--
			WO 2005-US1581	W 20050121

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Topical formulations of CoQ10 reduce the rate of tumor growth in an animal subject. In the expts. described herein, CoQ10 was shown to increase the rate of apoptosis in a culture of skin cancer cells but not normal cells. Moreover, treatment of tumor-bearing animals with a topical formulation of CoQ10 was shown to dramatically reduce the rate of tumor growth in the animals. Thus, a kit comprised Coenzyme Q10, Phospholipon-90, glycerol, BHT, ethanol, medium chain triglycerides and lavender.

IC ICM A61K

CC 63-6 (Pharmaceuticals)
 Section cross-reference(s): 1

ST topical coenzyme Q10

IT Glycerides, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (medium-chain; topical Coenzyme Q10 formulations)

IT Drug delivery systems
 (ointments, creams; topical Coenzyme Q10 formulations)

IT Phosphatidylcholines, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (soya; topical Coenzyme Q10 formulations)

IT Antitumor agents
 Apoptosis
 Human
 Lavandula
 Neoplasm
 (topical Coenzyme Q10 formulations)

IT Taxanes
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (topical Coenzyme Q10 formulations)

IT Drug delivery systems
 (topical; topical Coenzyme Q10 formulations)

IT 303-98-0, Coenzyme Q10
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (topical Coenzyme Q10 formulations)

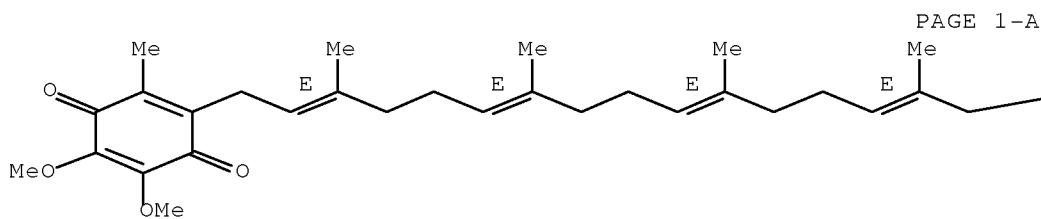
IT 50-18-0, Cyclophosphamide 55-98-1, Busulfan 56-81-5, Glycerol, biological studies 57-22-7, Vincristine 59-05-2, Methotrexate 64-17-5, Ethanol, biological studies 128-37-0, Butylated hydroxytoluene, biological studies 148-82-3, Melphalan 305-03-3, Chlorambucil 865-21-4, Vinblastine 4291-63-8, Cladribine 15663-27-1, Cisplatin 20830-81-3, Daunorubicin 23214-92-8, Doxorubicin 33069-62-4, Paclitaxel 114977-28-5, Docetaxel 135945-29-8, Phospholipon 90 156259-71-1, Phospholipon 90H
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (topical Coenzyme Q10 formulations)

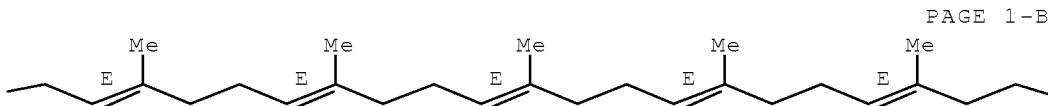
IT 303-98-0, Coenzyme Q10
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (topical Coenzyme Q10 formulations)

RN 303-98-0 ZCAPLUS

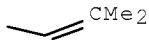
CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.





PAGE 1-C



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)
REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 9 OF 41 ZCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2005:588633 ZCAPLUS Full-text
DOCUMENT NUMBER: 143:103253
TITLE: Drug-containing nanoparticle, process for producing the same and parenterally administered preparation from the nanoparticle
INVENTOR(S): Ishihara, Tsutomu; Mizushima, Yutaka; Suzuki, Jun; Sekine, Junzou; Yamaguchi, Yoko; Igarashi, Rie
PATENT ASSIGNEE(S): LTT Bio-Pharma Co., Ltd., Japan
SOURCE: PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005060935	A1	20050707	WO 2004-JP15026	20041012 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2549966	A1	20050707	CA 2004-2549966	20041012 <--
EP 1698329	A1	20060906	EP 2004-792270	20041012 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1917859	A	20070221	CN 2004-80041856	20041012 <--
JP 3903061	B2	20070411	JP 2005-516421	20041012 <--
KR 2006123384	A	20061201	KR 2006-712602	20060623 <--

US 20070077286	A1	20070405	US 2006-596828	20060626 <--
PRIORITY APPLN. INFO.:			JP 2003-428462	A 20031224 <--
			WO 2004-JP15026	W 20041012 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB An external preparation or injectable solution that exerts the effect of enabling percutaneous or transmucous in vivo absorption of fat-soluble drugs and water-soluble drugs has not been satisfactorily attained hitherto. The injectable solution especially aims at sustained release and target effects. In particular, drug-containing nanoparticles (secondary nanoparticles) are provided by causing primary nanoparticles containing a fat-soluble drug or fat-solubilized water-soluble drug to act with a divalent or trivalent metal salt. Further, drug-containing nanoparticles (tertiary nanoparticles) are provided by first causing primary nanoparticles containing a fat-soluble drug or fat-solubilized water-soluble drug to act with a divalent or trivalent metal salt to thereby obtain secondary nanoparticles and thereafter causing a monovalent to trivalent basic salt to act on the secondary nanoparticles. Still further, there are provided a process for producing these nanoparticles, and a percutaneous or transmucous external preparation or injectable solution in which these nanoparticles are contained.

IC ICM A61K009-14
 ICS A61K009-06; A61K009-08; A61K009-10; A61K009-20; A61K009-70;
 A61K009-72; A61K047-02; A61K047-04; A61K047-10; A61K047-12;
 A61K047-24; A61K047-34; A61K047-36; A61K031-07; A61K031-122;
 A61K031-198; A61P003-02

CC 63-6 (Pharmaceuticals)

ST nanoparticle metal salt topical parenteral bioavailability

IT Lipids, biological studies
 Phosphatidylethanolamines, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (ethoxylated; manufacture of nanoparticles for topical and parenteral administration)

IT Vitamins
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (fat-soluble; manufacture of nanoparticles for topical and parenteral administration)

IT Drug delivery systems
 (gels, topical; manufacture of nanoparticles for topical and parenteral administration)

IT Steroids, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (hormones; manufacture of nanoparticles for topical and parenteral administration)

IT Drug delivery systems
 (hydrogels; manufacture of nanoparticles for topical and parenteral administration)

IT Castor oil
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (hydrogenated, ethoxylated; manufacture of nanoparticles for topical and parenteral administration)

IT Drug delivery systems
 (inhalants; manufacture of nanoparticles for topical and parenteral administration)

IT Drug delivery systems
 (injections; manufacture of nanoparticles for topical and parenteral administration)

IT Drug delivery systems
 (lotions; manufacture of nanoparticles for topical and parenteral administration)

IT Antibiotics
 Antihypertensives

Antipsychotics
 Antitumor agents
 Antiviral agents
 Calcium channel blockers
 Chemotherapy
 Drug bioavailability
 Immunomodulators
 Immunosuppressants
 (manufacture of nanoparticles for topical and parenteral administration)
 IT Prostaglandins
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (manufacture of nanoparticles for topical and parenteral administration)
 IT Drug delivery systems
 (nanoparticles; manufacture of nanoparticles for topical and parenteral administration)
 IT Anti-inflammatory agents
 (nonsteroidal; manufacture of nanoparticles for topical and parenteral administration)
 IT Drug delivery systems
 (ointments; manufacture of nanoparticles for topical and parenteral administration)
 IT Hormones, animal, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (steroi d; manufacture of nanoparticles for topical and parenteral administration)
 IT Drug delivery systems
 (suspensions; manufacture of nanoparticles for topical and parenteral administration)
 IT Drug delivery systems
 (tablets, buccal; manufacture of nanoparticles for topical and parenteral administration)
 IT Drug delivery systems
 (tapes; manufacture of nanoparticles for topical and parenteral administration)
 IT 64-17-5, Ethanol, uses 67-64-1, Acetone, uses 71-23-8, Propanol, uses 71-36-3, Butanol, uses
 RL: NUU (Other use, unclassified); USES (Uses)
 (manufacture of nanoparticles for topical and parenteral administration)
 IT 50-28-2, Estradiol, biological studies 50-50-0, Estradiol benzoate
 50-53-3, Chlorpromazine, biological studies 52-21-1, Prednisolone
 acetate 56-81-5, Glycerin, biological studies 57-10-3, Palmitic acid,
 biological studies 57-22-7, Vincristine 57-85-2, Testosterone
 propionate 58-22-0, Testosterone 59-05-2, Methotrexate 60-33-3,
 Linoleic acid, biological studies 68-26-8, Retinol 112-80-1, Oleic
 acid, biological studies 143-07-7, Lauric acid, biological studies
 143-19-1, Sodium oleate 302-25-0, Prednisolone phosphate
 303-98-0, Ubidecarenone 312-93-6, Dexamethasone phosphate
 315-37-7, Testosterone enanthate 360-63-4, Betamethasone phosphate
 363-24-6, Dinoprostone 378-44-9, Betamethasone 389-08-2, Nalidixic
 acid 439-14-5, Diazepam 463-40-1, Linolenic acid 544-63-8, Myristic
 acid, biological studies 745-65-3, Alprostadil 979-32-8, Estradiol
 valerate 1177-87-3, Dexamethasone acetate 1404-90-6, Vancomycin
 1406-16-2, Vitamin D 1406-18-4, Vitamin E 2152-44-5, Betamethasone
 valerate 2203-97-6, Hydrocortisone succinate 2920-86-7, Prednisolone
 succinate 3544-94-3, Chloramphenicol succinate 5104-49-4, Flurbiprofen
 5536-17-4, Vidarabine 5593-20-4, Betamethasone dipropionate 7646-85-7,
 Zinc chloride, biological studies 9005-64-5, Tween 20 9005-65-6, Tween

80 9005-66-7, Tween 40 9005-67-8, Tween 60 9005-70-3, Tween 85
 9036-19-5, Polyoxyethylene octylphenyl ether 10043-52-4, Calcium chloride, biological studies 12001-79-5, Vitamin K 15663-27-1, Cisplatin 17902-23-7, Tegafur 21829-25-4, Nifedipine 22071-15-4, Ketoprofen 23214-92-8, Doxorubicin 24729-96-2, Clindamycin phosphate 27321-96-6, Polyoxyethylene cholestryl ether 33069-62-4, Paclitaxel 59277-89-3, Acyclovir 59865-13-3, Cyclosporin 60299-11-8, Nifedipine hydrochloride 61422-45-5, Carmofur 64952-97-2, Latamoxef 70458-96-7, Norfloxacin 78110-38-0, Aztreonam 81103-11-9, Clarithromycin 82419-36-1, Ofloxacin 84957-29-9, Cefpirome 87638-04-8, Carumonam 91503-79-6, Flurbiprofen axetil 100286-90-6, Irinotecan hydrochloride 104987-11-3, Tacrolimus 111470-99-6, Amlodipine besylate 136470-78-5, Abacavir 145040-37-5, Candesartan cilexetil 154598-52-4, Efavirenz
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (manufacture of nanoparticles for topical and parenteral administration)

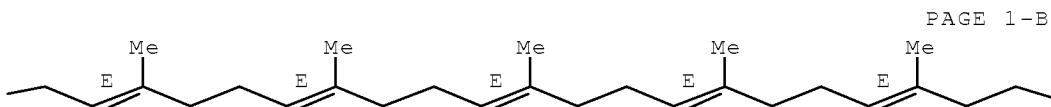
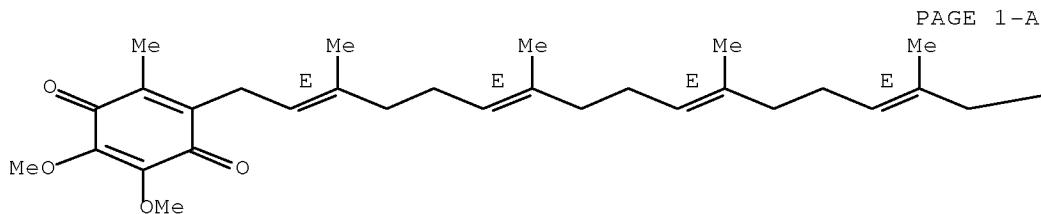
IT 303-98-0, Ubidecarenone

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (manufacture of nanoparticles for topical and parenteral administration)

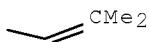
RN 303-98-0 ZCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



REFERENCE COUNT:

21

THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 10 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2005:96445 ZCPLUS Full-text
 DOCUMENT NUMBER: 142:170141
 TITLE: Annatto extract compositions including tocotrienols and tocopherols and methods of use
 INVENTOR(S): Tan, Barrie; Llobrrera, Jose
 PATENT ASSIGNEE(S): USA
 SOURCE: PCT Int. Appl., 60 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005009135	A1	20050203	WO 2004-US11366	20040412 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2521020	A1	20050203	CA 2004-2521020	20040412 <--
EP 1617724	A1	20060125	EP 2004-750079	20040412 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
PRIORITY APPLN. INFO.:			US 2003-461932P	P 20030410 <--
			US 2003-488310P	P 20030718 <--
			WO 2004-US11366	W 20040412 <--

AB Compns. and methods of use of annatto exts. including tocotrienols and tocopherols with an appropriate spectrum. This spectrum includes but not limited to low alpha tocopherol, high delta- and gamma-tocols, and mixts. with other exts. and/or nutrients. These compns. may be used in metabolic, inflammatory, cardiovascular, fatty liver and other diseases.

IC ICM A01N065-00

ICS A61K035-78

CC 1-12 (Pharmacology)

Section cross-reference(s): 11

IT Allium sativum

Alzheimer's disease

Anti-Alzheimer's agents

Anti-inflammatory agents

Anticholesteremic agents

Antidiabetic agents

Antihypertensives

Antiparkinsonian agents

Antitumor agents

Arecaceae

Bixa orellana

Blood analysis

Bone resorption inhibitors

Cardiovascular system, disease

Central nervous system

Cottonseed

10/597378

Dietary supplements
Glycine max
Human
Hypertension
Hypolipemic agents
Immunostimulants
Inflammation
Litchi
 Neoplasm
Nervous system agents
Neurotoxicity
Oryza sativa
Osteoporosis
Parkinson's disease
Psoriasis
Skin, disease
Skin preparations (pharmaceutical)
Zea mays
 (annatto extract compns. including tocotrienols and tocopherols for metabolic and other disorders)

IT Drug delivery systems
 (topical; annatto extract compns. including tocotrienols and tocopherols for metabolic and other disorders)

IT 54-28-4P 59-02-9P 60-33-3P, α -Linoleic acid, biological studies
119-13-1P 303-98-0P, CoQ10 490-23-3P 541-15-1P, Carnitine
556-02-5P, D-Tyrosine 4547-24-4P, Corosolic acid 6217-54-5P, DHA
6829-55-6P, Tocotrienol 7439-95-4P, Magnesium, biological studies
7440-47-3P, Chromium, biological studies 7440-70-2P, Calcium, biological
studies 9012-76-4P, Chitosan 10417-94-4P, EPA 12001-76-2P, Vitamin B
12738-23-7P, Oryzanol 14101-61-2P 16698-35-4P 16816-67-4P,
Pantethine 25612-59-3P 57828-26-9P, Lipoic acid 58864-81-6P
95975-55-6P, Gugulipid 142583-61-7P, Policosanol
RL: NPO (Natural product occurrence); PUR (Purification or recovery);
THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence);
PREP (Preparation); USES (Uses)

 (annatto extract compns. including tocotrienols and tocopherols for metabolic and other disorders)

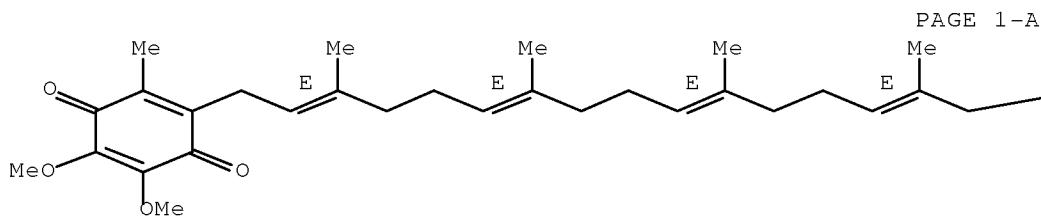
IT 303-98-0P, CoQ10
RL: NPO (Natural product occurrence); PUR (Purification or recovery);
THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence);
PREP (Preparation); USES (Uses)

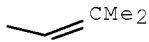
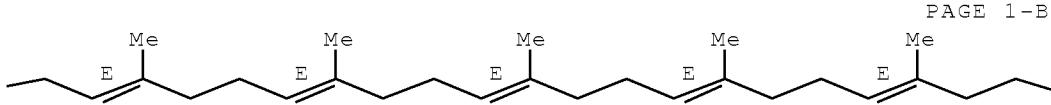
 (annatto extract compns. including tocotrienols and tocopherols for metabolic and other disorders)

RN 303-98-0 ZCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-
3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-
tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.





PAGE 1-C

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 11 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2005:527199 ZCPLUS Full-text
 DOCUMENT NUMBER: 143:65418
 TITLE: Water-based delivery systems comprising lipids
 INVENTOR(S): Skold, Thomas
 PATENT ASSIGNEE(S): Collagenex Pharmaceuticals, Inc., USA
 SOURCE: U.S. Pat. Appl. Publ., 28 pp., Cont.-in-part of U.S. Ser. No. 388,371.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050129722	A1	20050616	US 2004-957320	20040930 <--
WO 2003077861	A2	20030925	WO 2003-US7752	20030313 <--
WO 2003077861	A3	20050324		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20040009213	A1	20040115	US 2003-388371	20030313 <--
WO 2006039667	A2	20060413	WO 2005-US35531	20050930 <--
WO 2006039667	A3	20060629		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ,				

NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG,
SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN,
YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM
AU 2007211879 A1 20070913 AU 2007-211879 20070822 <--
US 20090081139 A1 20090326 US 2008-82406 20080409 <--
US 20090226491 A1 20090910 US 2008-290455 20081030 <--
PRIORITY APPLN. INFO.: US 2002-365059P P 20020313 <--
US 2003-388371 A2 20030313 <--
WO 2003-US7752 A2 20030313 <--
AU 2003-233396 A3 20030313 <--
US 2004-957320 A 20040930 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention relates to a water-based delivery system for an active substance, characterized by enhancing skin barrier restoration in the stratum corneum comprising water, a fatty acid, cholesterol, a ceramide and at least one skin lipid precursor. For example, a topical cream formulation (without an active ingredient) contained water 79.5%, Epikuron 200SH 3.5%, palmitic acid 1.5%, cholesterol 1.5%, mevalonic acid 0.01% or 0.1%, triethanolamine 0.5%, Phenonip 0.4%, xanthan gum 2.0%, Skinflux 2.0%, 25-hydroxycholecalciferol 0.0015% or 0.015%, propylene glycol 4.0%, glycerol 3.0%, and polyvinylpyrrolidone 2.0%. Addition of nonionic adjuvants, such as Brij 30, and Brij 35 affected the characteristics of the formulation.

IC ICM A61K031-715

ICS A01N043-04; A61K007-42; A61K031-685; A01N057-26

INCL 424401000; 424059000; 514078000; 424405000; 514054000

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1, 62

ST ceramide cholesterol fatty acid lipid precursor topical drug delivery

IT Ceramides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Ceramide 1, Ceramide 3; water-based topical delivery systems
comprising fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Ceramides

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Ceramide 6A, Ceramide 6b; water-based topical delivery
systems comprising fatty acid, cholesterol, ceramide and skin lipid
precursor)

IT Fatty acids, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(C10-24; water-based topical delivery systems comprising
fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Fatty acids, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(C16-18; water-based topical delivery systems comprising
fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Acne

Alopecia

Dandruff

Eczema

Psoriasis

Skin, neoplasm

(agents for treatment of; water-based topical delivery
systems comprising fatty acid, cholesterol, ceramide and skin lipid
precursor)

IT Skin, disease

(aging, wrinkles, agents for treatment of; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Polyoxyalkylenes, biological studies
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (alkylphenol ethers; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Agglutinins and Lectins
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (aloe-derived; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Infection
 (cutaneous, fungal, agents for treatment of; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Skin, disease
 (dry, agents for treatment of; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Skin
 (enhancement of barrier restoration of; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Pimpinella anisum
 (exts.; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Hair preparations
 (growth stimulants; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Lecithins
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (hydrogenated; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Skin, disease
 (infection, fungal, agents for treatment of; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Pediculus humanus corporis
 (infections, agents for treatment of; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Skin, disease
 (lesion, agents for treatment of; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Lysophosphatides
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (lysophosphatidylglycerols; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Drug delivery systems
 (ointments, creams; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Biological transport
 (permeation; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)

IT Sphingosines
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (phytosphingosines; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)

- IT Lecithins
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(soya; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)
- IT Skin
 - (stratum corneum; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)
- IT Drug delivery systems
 - (topical; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)
- IT Analgesics
 - Particle size
 - Sunscreens
 - Suntanning agents
 - Vaccines
 - Zeta potential
 - (water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)
- IT Catecholamines, biological studies
 - Ceramides
 - Cerebrosides
 - Estrogens
 - Hormones, animal, biological studies
 - Interferons
 - Lipids, biological studies
 - Lysophosphatidic acids
 - Lysophosphatidylcholines
 - Lysophosphatidylethanolamines
 - Lysophosphatidylinositols
 - Lysophosphatidylserines
 - Lysophospholipids
 - Peptides, biological studies
 - Phosphatidic acids
 - Phosphatidylcholines, biological studies
 - Phosphatidylethanolamines, biological studies
 - Phosphatidylglycerols
 - Phosphatidylinositols
 - Phosphatidylserines
 - Phospholipids, biological studies
 - Proteins
 - Vitamins
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)
- IT 75168-11-5, Acridine Orange 10-nonyl bromide
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Acridine Orange 10-nonyl bromide; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)
- IT 9003-01-4D, crosslinked
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Carbomer; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)
- IT 34354-88-6, Ceramide 3
 - RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(Ceramide 3; water-based topical delivery systems comprising fatty acid, cholesterol, ceramide and skin lipid precursor)
- IT 50-81-7, Ascorbic acid, biological studies 54-11-5, Nicotine 56-81-5, Glycerine, biological studies 57-10-3, Palmitic acid, biological studies 57-11-4, Stearic acid, biological studies 57-55-6, Propylene glycol,

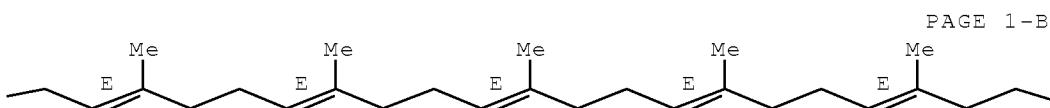
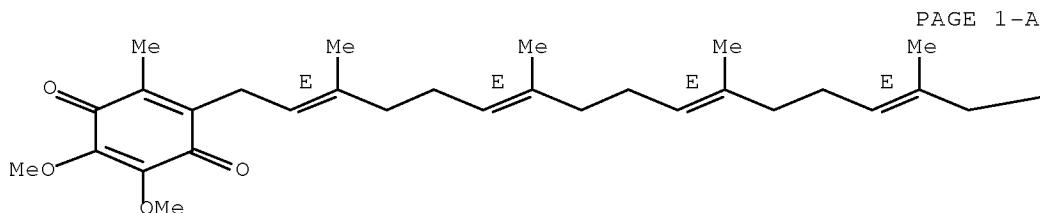
biological studies 57-88-5, Cholesterol, biological studies 58-61-7, Adenosine, biological studies 58-85-5, Biotin 60-33-3, Linoleic acid, biological studies 64-17-5, Ethanol, biological studies 65-85-0, Benzoic acid, biological studies 79-81-2, Retinyl palmitate 112-80-1, Oleic acid, biological studies 112-85-6, Behenic acid 116-31-4, Retinal 121-44-8, Triethylamine, biological studies 123-78-4, Sphingosine 127-47-9, Retinyl acetate 137-58-6, Lidocaine 137-66-6, Ascorbyl palmitate 143-07-7, Lauric acid, biological studies 145-13-1, Pregnenolone 150-97-0, Mevalonic acid 302-79-4, Retinoic acid 303-98-0, Coenzyme Q10 373-49-9, Palmitoleic acid 434-16-2, Dehydrocholesterol 446-72-0, Genistein 463-40-1, Linolenic acid 464-92-6, Asiatic acid 490-83-5, Dehydroascorbic acid 496-65-1, Pantetheine 506-26-3, γ -Linolenic acid 506-30-9, Arachidic acid 506-32-1, Arachidonic acid 544-63-8, Myristic acid, biological studies 554-62-1, Phytosphingosine 557-59-5, Lignoceric acid 616-91-1, N-Acetylcysteine 631-89-0, Retinyl linoleate 674-26-0, Mevalonic acid lactone 816-94-4, DSPC 1071-28-9, 3-Aminopropyl dihydrogen phosphate 1200-22-2, Lipoic acid 1783-84-2, Homo- γ -linolenic acid 2237-36-7, 4-Methoxysalicylic acid 2441-53-4, Columbinic acid 5274-68-0, Tetraethylene glycol monododecyl ether 7069-42-3, Retinyl propionate 7732-18-5, Water, biological studies 9002-92-0 9003-39-8, PVP 10417-94-4, Timnodonic acid 11138-66-2, Xanthan gum 17364-18-0 19356-17-3, 25-Hydroxycholecalciferol 25322-68-3D, fatty acid esters and mercaptan complexes 42415-70-3, Sodium lauroyl lactate 57828-26-9, Lipoic acid 66176-93-0 68247-19-8, Inositol phosphate 72088-94-9, 5(6)-Carboxyfluorescein 89022-37-7, 6,9,13-Eicosatrienoic acid 106392-12-5, Polyethylene oxide-polypropylene oxide block copolymer 106685-40-9, Adapalene 110483-07-3 129983-52-4 170231-37-5 170231-40-0 178617-15-7 178617-16-8 189384-85-8 259150-85-1, SK-influx 264624-38-6 603950-78-3 603950-79-4 603950-80-7 603950-81-8 603950-82-9 603950-83-0 603950-84-1 603950-85-2 603950-86-3 603950-87-4 603950-88-5 603950-89-6 603950-90-9 603950-91-0 603950-92-1 603950-93-2 603950-94-3 603950-95-4 603950-96-5 603950-97-6 603950-98-7 603950-99-8 603951-00-4 603951-01-5 603951-02-6 603951-03-7 603951-04-8 603951-05-9 603951-06-0 603951-07-1 603951-08-2 603951-09-3 603951-10-6 603951-11-7 603951-12-8 603951-13-9 603951-14-0 603951-15-1 603951-16-2 603951-17-3 603951-18-4 603951-19-5 603951-20-8 603951-21-9 603951-22-0 603951-23-1 603951-24-2 603951-25-3 603951-26-4 603951-27-5 603951-28-6 603951-29-7 603951-30-0 603951-31-1 603951-32-2 603951-33-3 603951-34-4 603951-35-5 603951-36-6 603951-37-7 603951-38-8 603951-39-9 603951-40-2

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (water-based topical delivery systems comprising fatty acid,
 cholesterol, ceramide and skin lipid precursor)

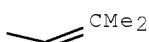
IT 303-98-0, Coenzyme Q10
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (water-based topical delivery systems comprising fatty acid,
 cholesterol, ceramide and skin lipid precursor)

RN 303-98-0 ZCAPLUS
 CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-
 3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-
 tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD
(1 CITINGS)

L88 ANSWER 12 OF 41 ZCAPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2005:303178 ZCAPLUS Full-text
 DOCUMENT NUMBER: 142:349112
 TITLE: Tocopherol treatment of diabetic microvascular and macrovascular complications
 INVENTOR(S): Papas, Andreas M.; Papas, Konstantinos A.; Papas, Klearchos K.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 11 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050074447	A1	20050407	US 2004-956538	20041001 <--
WO 2005032478	A2	20050414	WO 2004-US32210	20041001 <--
WO 2005032478	A3	20050602		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,				

AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
SN, TD, TG

PRIORITY APPLN. INFO.: US 2003-507826P P 20031001 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Disclosed is a method of preventing or retarding the progression of diabetic microvascular and macrovascular complications by chronically administering a therapeutically effective amount of gamma-tocopherol to a diabetic patient. It is further disclosed that synergistic cytoprotectant activity is provided by administering a combination of gamma-tocopherol and alpha-tocopherol.

IC ICM A61K038-43
ICS A61K031-355

INCL 424094100; 514458000

CC 1-12 (Pharmacology)
Section cross-reference(s): 18

IT Pancreatic islet of Langerhans, neoplasm
(insulinoma, cells, cytoprotective activity of tocotrienols in; tocopherol treatment of diabetic microvascular and macrovascular complications)

IT Drug delivery systems
(topical; tocopherol treatment of diabetic microvascular and macrovascular complications)

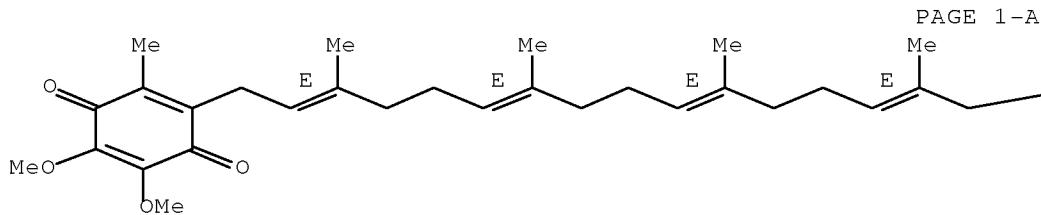
IT 50-81-7, Vitamin C, biological studies 127-40-2, Lutein 144-68-3, Zeaxanthin 303-98-0, Coenzyme Q10 616-91-1, N-Acetylcysteine 1200-22-2, α -Lipoic acid 1721-51-3, α -Tocotrienol 6829-55-6, Tocotrienol 7235-40-7, Beta-carotene 7440-47-3, Chromium, biological studies 7440-50-8, Copper, biological studies 7440-66-6, Zinc, biological studies 7732-18-5, Water, biological studies 7782-49-2, Selenium, biological studies 14101-61-2, γ -Tocotrienol 14992-62-2, Acetyl carnitine 25612-59-3, δ -Tocotrienol
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tocopherol treatment of diabetic microvascular and macrovascular complications)

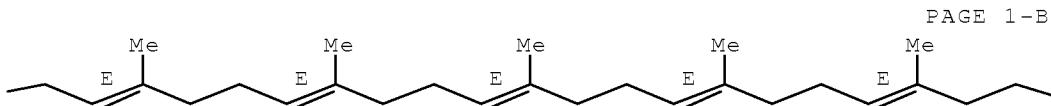
IT 303-98-0, Coenzyme Q10
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tocopherol treatment of diabetic microvascular and macrovascular complications)

RN 303-98-0 ZCAPLUS

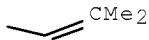
CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.





PAGE 1-C



L88 ANSWER 13 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2004:372848 ZCPLUS Full-text
 DOCUMENT NUMBER: 140:386058
 TITLE: Methods using antioxidant flavonoid compounds for the treatment of peripheral neural and vascular ailments
 INVENTOR(S): Rosenbloom, Richard A.
 PATENT ASSIGNEE(S): The Quigley Corporation, USA
 SOURCE: U.S. Pat. Appl. Publ., 11 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 20040087516	A1	20040506	US 2002-288825	20021106 <--
US 7083813	B2	20060801		
US 20050239721	A1	20051027	US 2005-165151	20050623 <--
US 7410659	B2	20080812		

PRIORITY APPLN. INFO.: US 2002-288825 A3 20021106 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Compns. and methods for the treatment of peripheral neural and vascular ailments are disclosed. The method comprises administering a flavonoid compound with antioxidant properties, optionally formulated in a acceptable carrier. This compound or combination of compds. provides significant, effective relief of the symptoms of peripheral neural or vascular ailments. In addition, the compns., when used according to the methods of the invention, do not exhibit the severe side effects of many prior art compns. proposed for treatment of these ailments.

IC ICM A61K031-7048

ICS A61K031-353

INCL 514027000; X51-445.6

CC 1-12 (Pharmacology)

Section cross-reference(s): 63

IT Alopecia

Analgesics

Angiogenesis

Antioxidants

Cardiovascular agents

Circulation

Cosmetics
 Human
 Nervous system agents
 Pain
 Permeation enhancers
 (antioxidant flavonoid compds. for treatment of peripheral neural and
 vascular ailments)
 IT Drug delivery systems
 (topical; antioxidant flavonoid compds. for treatment of
 peripheral neural and vascular ailments)
 IT 50-81-7, Ascorbic acid, biological studies 58-95-7, Vitamin E acetate
 60-81-1, Phloridzin 60-82-2, Phloretin 67-97-0, Vitamin D3 70-18-8,
 Glutathione, biological studies 79-81-2, Vitamin A palmitate 81-13-0,
 D-Panthenol 87-44-5, Caryophyllene 90-18-6, Quercetagetin 90-19-7,
 Rhamnetin 117-39-5, Quercetin 117-39-5D, Quercetin, derivs.
 120-72-9, Indole, biological studies 134-04-3, Pelargonidin 137-66-6,
 Ascorbyl palmitate 152-95-4, Sophoricoside 153-18-4, Rutin 154-23-4,
 Catechin 303-98-0, Coenzyme Q10 446-72-0, Genistein
 458-37-7, Curcumin 474-07-7, Brazilin 476-66-4, Ellagic acid
 480-10-4, Astragalin 480-16-0, Morin 480-18-2, Dihydroquercetin
 480-36-4, Linarin 480-40-0, Chrysin 480-40-0D, Chrysin, derivs.
 480-41-1, Naringenin 480-44-4, Acacetin 482-36-0, Hyperin 482-39-3,
 Kaempferol-3-rhamnoside 489-35-0, Gossypetin 490-46-0, Epicatechin
 491-50-9, Quercimeritin 491-67-8, Baicalein 491-70-3, Luteolin
 491-71-4, Chrysoeriol 506-26-3, Gamma linolenic acid 517-28-2,
 Haematoxylin 520-11-6, Nepetin 520-12-7, Pectolinarigenin 520-18-3,
 Kaempferol 520-26-3, Hesperidine 520-27-4, Diosmin 520-33-2,
 Hesperitin 520-34-3, Diosmetin 520-36-5, Apigenin 522-12-3,
 Quercitrin 528-48-3, Fisetin 528-58-5, Cyanidin 529-44-2, Myricetin
 529-53-3, Scutellarein 529-53-3D, Scutellarein, derivs. 548-83-4,
 Galangin 549-17-7, Oxyayanin-a 549-32-6, Reynoutrin 569-90-4,
 Nepetrin 572-30-5, Avicularin 578-74-5, Cosmosin 603-56-5,
 Chrysosplenol B 632-85-9, Wogonin 652-78-8, Gossypetin-8-glucoside
 961-29-5, Isoliquiritigenin 970-74-1, (-)-Epigallocatechin 989-51-5,
 (-)-Epigallocatechin-gallate 1200-22-2, α -Lipoic acid 1340-08-5,
 Citrin 1406-18-4, Vitamin E 1406-18-4D, Vitamin E, esters 1617-49-8,
 3,3',4-Tri-o-methyl-ellagic acid 1617-53-4, Amentoflavone 3416-24-8D,
 Glucosamine, ascorbic acid conjugates 3681-93-4, Vitexin 5041-67-8,
 Juglanin 5041-81-6, Isoliquiritin 5188-73-8, Axillarin 5373-11-5,
 Luteolin-7-glucoside 6601-54-3, Diacetylcirosimarin 6980-20-7,
 TetraHER 7085-55-4, TriHER 7212-44-4, Nerolidol 10236-47-2, Naringin
 11103-57-4, Vitamin A 16485-10-2, DL-Panthenol 17306-46-6, Rhoifolin
 17680-84-1, Hispiduloside 18003-33-3, 6-Hydroxy-luteolin 18490-95-4,
 Brevifolin carboxylic acid 20229-56-5, Spiraeoside 21637-25-2,
 Isoquercitrin 22697-65-0, 6-Hydroxykaempferol-3,6-dimethyl ether
 22888-70-6, Silibinin 23615-30-7, Chrysosplenoside-a 23627-87-4,
 Trifolin 23869-24-1, MonoHER 24512-68-3, Sorbarin 25321-00-0,
 Chrysosplenoside D 25694-72-8, Lonicerin 26544-34-3, Apiin
 26854-07-9, DiHER 28978-02-1, Pectolinarin 29350-73-0D, Cadinene,
 derivs. 29741-10-4, Luteolin-7-glucuronide 29782-68-1, Silydianin
 29913-71-1, Licuraside 32511-63-0, 1,25-Dihydroxyvitamin D3
 32602-81-6, Kaempferol-3-neohesperidoside 33889-69-9, Silychristin
 52225-20-4, DL- α -Tocopheryl acetate 53755-56-9, Linariin
 61276-17-3, Acteoside 61360-94-9, Flavosativaside 62624-30-0, Ascorbic
 acid 64661-76-3, Flavocannabaside 65666-07-1, Silymarin 67255-34-9,
 Iridine 70360-12-2, Sideritoflavone 79886-50-3 84632-09-7,
 6,3',4'-Trihydroxy-5,7,8-trimethoxyflavone 97560-11-7, Kolaviron
 107646-82-2, Ethyl brevifolin carboxylate 123715-11-7D, derivs.
 125712-75-6 132951-90-7, Macrocarpal-a 142628-53-3, Macrocarpal-g
 142647-71-0, Macrocarpal D 142698-60-0, Macrocarpal-b 439217-49-9,

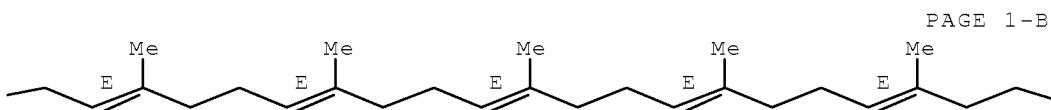
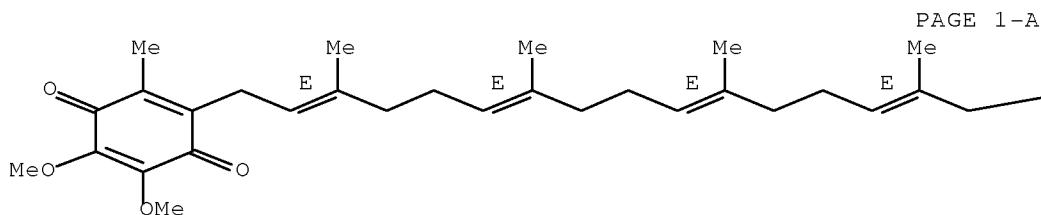
Dimethylmussaenoside 524727-65-9, Maniflavone 524729-83-7, Nelumboside 537684-20-1, Dosmetin 537684-31-4, Ebinin
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (antioxidant flavonoid compds. for treatment of peripheral neural and vascular ailments)

IT 303-98-0, Coenzyme Q10
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (antioxidant flavonoid compds. for treatment of peripheral neural and vascular ailments)

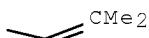
RN 303-98-0 ZCPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (4 CITINGS)
 REFERENCE COUNT: 127 THERE ARE 127 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 14 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2003:757479 ZCPLUS Full-text
 DOCUMENT NUMBER: 139:265779
 TITLE: Water-based drug delivery systems
 INVENTOR(S): Skoeld, Thomas
 PATENT ASSIGNEE(S): Collagenex Pharmaceuticals, Inc., USA

10/597378

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003077861	A2	20030925	WO 2003-US7752	20030313 <--
WO 2003077861	A3	20050324		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2476859	A1	20030925	CA 2003-2476859	20030313 <--
AU 2003233396	A1	20030929	AU 2003-233396	20030313 <--
AU 2003233396	B2	20070524		
EP 1534213	A2	20050601	EP 2003-728242	20030313 <--
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2005522463	T	20050728	JP 2003-575915	20030313 <--
NZ 534377	A	20080430	NZ 2003-534377	20030313 <--
US 20050129722	A1	20050616	US 2004-957320	20040930 <--
AU 2007211879	A1	20070913	AU 2007-211879	20070822 <--
US 20090226491	A1	20090910	US 2008-290455	20081030 <--
PRIORITY APPLN. INFO.:			US 2002-365059P	P 20020313 <--
			AU 2003-233396	A3 20030313 <--
			US 2003-388371	A2 20030313 <--
			WO 2003-US7752	W 20030313 <--
			US 2004-957320	A1 20040930 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention relates to a water-based drug delivery system, characterized by enhancing skin barrier restoration in the stratum corneum comprising water, a fatty acid, cholesterol, a ceramide and at least one skin lipid precursor.

Thus, a formulation contained water 79.75, Epikuron 200SH 3.5, palmitic acid 1.5, cholesterol 1.5, mevalonic acid 0.01, triethanolamine 0.5, phenonip 0.4, xanthan gum 2.0, Skin-flux 2.0, 25-hydroxycholecalciferol 0.0015, propylene glycol 4.0, glycerol 3.0, and PVP 2.0%.

IC ICM A61K

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 62

IT Drug delivery systems

(liposomes, topical; water-based drug delivery systems)

IT Drug delivery systems

(topical; water-based drug delivery systems)

IT Alopecia

Analgesics

Antitumor agents

Cosmetics

Eczema

Pain

Pruritus

Psoriasis

Skin
 Skin, neoplasm
 Sunscreens
 Suntanning agents
 Vaccines
 (water-based drug delivery systems)

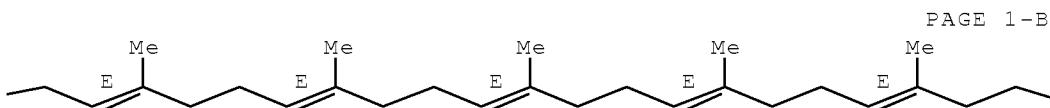
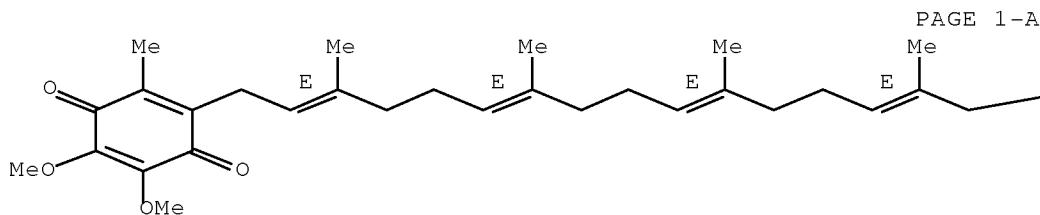
IT 50-81-7, Ascorbic acid, biological studies 54-11-5, Nicotine 56-81-5,
 Glycerine, biological studies 57-10-3, Hexadecanoic acid, biological
 studies 57-11-4, Octadecanoic acid, biological studies 57-55-6,
 Propylene glycol, biological studies 57-88-5, Cholesterol, biological
 studies 58-61-7, Adenosine, biological studies 58-85-5, Biotin
 60-33-3, Linoleic acid, biological studies 65-85-0D, Benzoic acid,
 derivs. 79-81-2, Retinyl palmitate 89-65-6, Erythorbic acid
 102-71-6, Triethanolamine, biological studies 112-80-1, 9-Octadecenoic
 acid (9Z)-, biological studies 112-85-6, Docosanoic acid 116-31-4,
 Retinal 127-47-9, Retinyl acetate 137-66-6, Ascorbyl palmitate
 143-07-7, Lauric acid, biological studies 145-13-1, Pregnenolone
 150-97-0, Mevalonic acid 303-98-0, Coenzyme Q10 373-49-9,
 Palmitoleic acid 434-16-2, DehydroCholesterol 446-95-7, Genisteine
 463-40-1, Linolenic acid 464-92-6, Asiatic acid 490-83-5,
 DehydroAscorbic acid 496-65-1, Pantetheine 506-26-3, γ -Linolenic
 acid 506-30-9, Eicosanoic acid 506-32-1, Arachidonic acid 544-63-8,
 Myristic acid, biological studies 554-62-1, Phytosphingosine 557-59-5,
 Tetracosanoic acid 616-91-1, N-Acetylcysteine 631-89-0, Retinyl
 linoleate 816-94-4, DSPC 1071-28-9 1783-84-2, Homo- γ -Linolenic
 acid 2237-36-7, 4-Methoxysalicylic acid 2441-53-4, Columbinic acid
 7069-42-3, Retinyl propionate 9003-39-8, Polyvinylpyrrolidone
 10417-94-4, Timnodonic acid 19356-17-3, 25-Hydroxycholecalciferol
 57828-26-9, Lipoic acid 66176-93-0, Cimicifugoside 68247-19-8,
 Inositol phosphate 89022-37-7, 6,9,13-Eicosatrienoic acid 106685-40-9,
 Adapalene 110483-07-3 129983-52-4 170231-37-5 170231-40-0
 178617-15-7 178617-16-8 189384-85-8 259150-85-1, SK-influx
 264624-38-6, 27-Deoxyactein 603950-78-3 603950-79-4 603950-80-7
 603950-81-8 603950-82-9 603950-83-0 603950-84-1 603950-85-2
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 603951-01-5 603951-02-6 603951-03-7 603951-04-8 603951-05-9
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 603951-16-2 603951-17-3 603951-18-4 603951-19-5 603951-20-8
 603951-21-9 603951-22-0 603951-23-1 603951-24-2 603951-25-3
 603951-26-4 603951-27-5 603951-28-6 603951-29-7 603951-30-0
 603951-31-1 603951-32-2 603951-33-3 603951-34-4 603951-35-5
 603951-36-6 603951-37-7 603951-38-8 603951-39-9 603951-40-2
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (water-based drug delivery systems)

IT 303-98-0, Coenzyme Q10
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (water-based drug delivery systems)

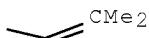
RN 303-98-0 ZCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-
 3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-
 tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD
 (3 CITINGS)
 REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 15 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2003:376557 ZCPLUS Full-text
 DOCUMENT NUMBER: 138:367907
 TITLE: Nutritional supplements and methods for prevention,
 reduction and treatment of radiation injury
 INVENTOR(S): Rosenbloom, Richard A.
 PATENT ASSIGNEE(S): The Quigley Corporation, USA
 SOURCE: PCT Int. Appl., 41 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 5
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003039452	A2	20030515	WO 2002-US13526	20020501 <--
WO 2003039452	A3	20041202		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,				

CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 20030103953	A1	20030605	US 2001-993003	20011106 <--
US 6753325	B2	20040622		
US 20030103954	A1	20030605	US 2002-45790	20020114 <--
US 7435725	B2	20081014		
US 20030105027	A1	20030605	US 2002-132642	20020425 <--
CA 2465945	A1	20030515	CA 2002-2465945	20020501 <--
AU 2002309615	A1	20030519	AU 2002-309615	20020501 <--
AU 2002309615	B2	20071018		
EP 1505984	A2	20050216	EP 2002-736624	20020501 <--
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JP 2005510509	T	20050421	JP 2003-541744	20020501 <--
NZ 532774	A	20080829	NZ 2002-532774	20020501 <--
IN 2004DN01165	A	20060728	IN 2004-DN1165	20040430 <--
MX 2004004376	A	20040811	MX 2004-4376	20040506 <--
PRIORITY APPLN. INFO.:			US 2001-993003	A 20011106 <--
			US 2002-45790	A 20020114 <--
			US 2002-132642	A 20020425 <--
			WO 2002-US13526	W 20020501 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A nutritional supplement composition for the prevention, reduction or treatment of radiation injury due to exposure to ionizing radiation, including one or more compds. that regulates cell differentiation and/or cell proliferation, and one or more antioxidants, optionally formulated in a pharmaceutically acceptable carrier for an oral composition. The composition of the present invention may further include optional ingredients such as flavonoids, flavonoid derivs., selenium, selenium compds., anti-inflammatories, organic germanium, Korean ginseng, American ginseng, Siberian ginseng and B-complex vitamins. A method for the administration of an oral composition for the purpose of preventing, reducing or treating radiation injury involves orally administering an effective amount of a composition including one or more compds. that regulates cell differentiation and/or cell proliferation, and one or more antioxidants to a person before, during or after radiation exposure. A method for the topical administration of the composition in accordance with the present invention for the purpose of preventing, reducing or treating radiation injury involves topically administering an effective amount of the composition of the invention an area of skin, which has been or will be exposed to ionizing radiation. The compns. and methods can be employed to prevent, reduce or treat radiation injury caused by a wide variety of types of radiation exposure.

IC ICM A61K

CC 17-6 (Food and Feed Chemistry)

Section cross-reference(s): 62, 63

IT Anti-inflammatory agents

Antioxidants

Candy

Cell differentiation

Cell proliferation

Dentifrices

Food additives

Gamma ray

Ionizing radiation

Mouthwashes

Panax

Radiation

Radioprotectants

(nutritional supplements and methods for prevention, reduction and treatment of radiation injury)

IT 50-81-7, Vitamin C, biological studies 59-02-9, α -Tocopherol
 67-97-0, Vitamin D3 67-97-0D, Vitamin D3, salts 70-18-8, Glutathione,
 biological studies 79-81-2, Vitamin A palmitate 87-44-5, Caryophyllene
 90-18-6, Quercetagetin 90-19-7, Rhamnetin 117-39-5, Quercetin
 120-72-9, Indole, biological studies 137-66-6, Ascorbyl palmitate
 142-50-7, Nerolidol 152-95-4, Sophoricoside 153-18-4, Rutin
 303-98-0, Coenzyme Q10 434-16-2, Provitamin D3 446-72-0,
 Genistein 458-37-7, Curcumin 458-37-7D, Curcumin, derivs. 474-07-7,
 Brazilin 476-66-4, Ellagic acid 480-10-4, Astragalin 480-16-0, Morin
 480-36-4, Linarin 480-40-0 480-41-1, Naringenin 480-44-4, Acacetin
 482-36-0, Hyperin 482-39-3, Kaempferol-3-rhamnoside 483-76-1,
 δ -Cadinene 490-83-5, Dehydroascorbic acid 491-50-9,
 Quercimeritrin 491-67-8, Baicalein 491-70-3, Luteolin 491-71-4,
 Chrysoeriol 517-28-2, Hematoxylin 520-11-6, Nepetin 520-12-7,
 Pectolinarigenin 520-26-3, Hesperidine 520-33-2, Hesperitin
 520-34-3, Diosmetin 520-36-5, Apigenin 522-12-3, Quercitrin
 528-48-3, Fisetin 528-58-5, Cyanidin 529-44-2, Myricetin 529-53-3,
 Scutellarein 548-83-4, Galangin 549-17-7, Oxyayanin-a 549-32-6,
 Reynoutrin 569-90-4, Nepetrin 572-30-5, Avicularin 578-74-5,
 Cosmosin 632-85-9, Wogonin 652-78-8 961-29-5, Isoliquiritigenin
 1200-22-2, α -Lipoic acid 1340-08-5, Citrin 1447-88-7
 1617-49-8, 3,3',4-Tri-o-methyl ellagic acid 1617-53-4, Amentoflavone
 3681-93-4, Vitexin 4172-43-4D, L-Lyxonic acid, salts 4172-44-5,
 L-Xyloonic acid 4172-44-5D, L-Xyloonic acid, salts 5041-67-8, Juglanin
 5041-81-6, Isoliquiritin 5188-73-8, Axillarin 5373-11-5,
 Luteolin-7-glucoside 6601-54-3, Diacetylclirsaritin 7235-40-7,
 β -Carotene 7306-96-9, L-Threonic acid 7306-96-9D, L-Threonic
 acid, salts 7440-56-4D, Germanium, organic derivs. 7782-49-2, Selenium,
 biological studies 7782-49-2D, Selenium, compds. 9054-89-1, Superoxide
 dismutase 10236-47-2, Naringin 11103-57-4, Vitamin A 11103-57-4D,
 Vitamin A, esters 12001-76-2, Vitamin B 12758-40-6 17306-46-6,
 Rhoifolin 17680-84-1, Hispiduloside 17912-87-7 18003-33-3,
 6-Hydroxyluteolin 18490-95-4, Brevifolin carboxylic acid 19356-17-3,
 25-Hydroxycholecalciferol 20229-56-5, Spiraeoside 21637-25-2,
 Isoquercitrin 22697-65-0, 6-Hydroxykaempferol-3,6-dimethyl ether
 23615-30-7, Chrysosplenoside A 24512-68-3, Sorbarin 25321-00-0,
 Chrysosplenoside d 25694-72-8, Lonicerin 26544-34-3, Apiin
 28978-02-1, Pectolinarin 29741-10-4, Luteolin-7-glucuronide
 29913-71-1, Licuraside 32222-06-3, Calcitriol 32602-81-6,
 Kaempferol-3-neohesperidoside 33876-31-2, Trifolin 53755-56-9,
 Linariin 60534-79-4 61276-17-3, Acteoside 61360-94-9,
 Flavosativaside 61891-39-2 64661-76-3, Flavocannabiside 65666-07-1,
 Silymarin 67255-34-9, Iridine 70360-12-2, Sideritoflavone
 79886-50-3, 1,2,3,6-Tetra-o-galloyl- β -D-glucose 82451-22-7
 84632-09-7, 6,3',4'-Trihydroxy-5,7,8-trimethoxyflavone 97560-11-7,
 Kolaviron 107646-82-2, Ethyl brevifolin carboxylate 129932-47-4
 132951-90-7, Macrocarpal-a 142628-53-3, Macrocarpal-g 142647-71-0,
 Macrocarpal D 142698-60-0, Macrocarpal-b 524689-97-2 524727-65-9,
 Maniflavone 524729-83-7, Nelumboside
 RL: COS (Cosmetic use); FFD (Food or feed use); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (nutritional supplements and methods for prevention, reduction and
 treatment of radiation injury)

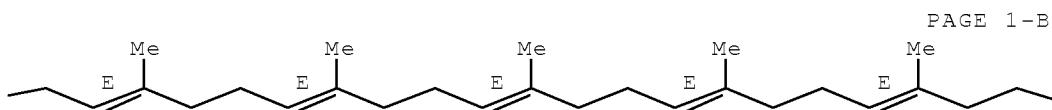
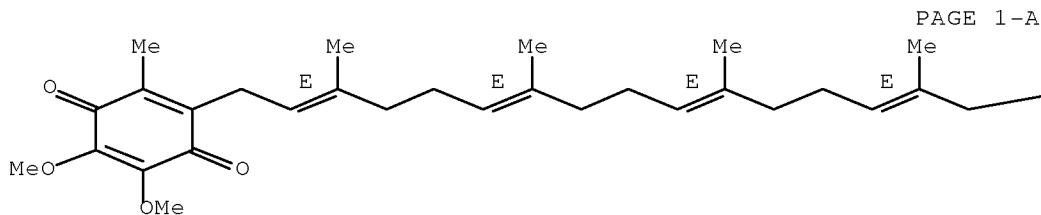
IT 303-98-0, Coenzyme Q10
 RL: COS (Cosmetic use); FFD (Food or feed use); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (nutritional supplements and methods for prevention, reduction and
 treatment of radiation injury)

RN 303-98-0 ZCAPLUS

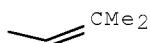
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CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
(4 CITINGS)
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 16 OF 41 ZCAPLUS COPYRIGHT 2010 ACS on STN
ACCESSION NUMBER: 2003:334926 ZCAPLUS Full-text
DOCUMENT NUMBER: 138:343911
TITLE: Delivery system containing Shilajit for pharmaceuticals and nutrition and cosmetics
INVENTOR(S): Ghosal, Shubnath
PATENT ASSIGNEE(S): Natreon Inc., USA; Indian Herbs Research & Supply Company Ltd.
SOURCE: PCT Int. Appl., 34 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003035094	A1	20030501	WO 2002-US25683	20020813 <-- W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
 PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
 UA, UG, UZ, VN, YU, ZA, ZM, ZW
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
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 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,
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 US 6558712 B1 20030506 US 2001-957797 20010921 <--
 AU 2002324690 A1 20030506 AU 2002-324690 20020813 <--
 EP 1435982 A1 20040714 EP 2002-759348 20020813 <--
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 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
 PRIORITY APPLN. INFO.: US 2001-957797 A 20010921 <--
 WO 2002-US25683 W 20020813 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A stable, water-soluble delivery system which is a purified Shilajit composition obtained by extraction of native Shilajit, preferably containing at least 40% by weight of a carrier which is purified fulvic acid, characterized by having a sponge-like structure punctured by voids of about 200-1000 Å in diameter, and a mol. weight of about 700-2500, and an effective amount of an active pharmaceutical, nutritional or cosmetic ingredient added to the carrier and filling voids therein. Thus, a tablet composition contained tamoxifen citrate 10.00, Shilajit/fulvic acid 100.00, lactose 50.00, microcryst. cellulose 50.00, Croscarmellose sodium 2.00, and Mg stearate 1.00 mg/tablet.

IC ICM A61K035-78
 CC 63-6 (Pharmaceuticals)
 Section cross-reference(s): 17, 62
 IT Aging, animal
 Analgesics
 Anthelmintics
 Anti-inflammatory agents
 Antianginal agents
 Antiarrhythmics
 Antibacterial agents
 Anticoagulants
 Anticonvulsants
 Antidepressants
 Antidiabetic agents
 Antihistamines
 Antihypertensives
 Antimalarials
 Antimigraine agents
 Antiobesity agents
 Antioxidants
 Antiparkinsonian agents
 Antipsychotics
 Antitumor agents
 Antiviral agents
 Anxiolytics
 Cognition enhancers
 Cosmetics
 Diagnostic agents
 Diuretics
 Drug delivery systems
 Fungicides
 Hypnotics and Sedatives
 Immunosuppressants

Inotropics
 Muscarinic antagonists
 Muscle relaxants
 Nutrients
 Nutrition, animal
 Osteoporosis
 Protozoacides
 Sunscreens
 β -Adrenoceptor antagonists
 (delivery system containing Shilajit for pharmaceuticals and nutrition and cosmetics)

IT Drug delivery systems
 (topical; delivery system containing Shilajit for pharmaceuticals and nutrition and cosmetics)

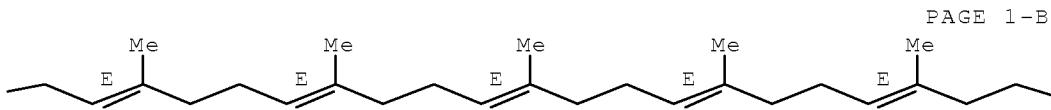
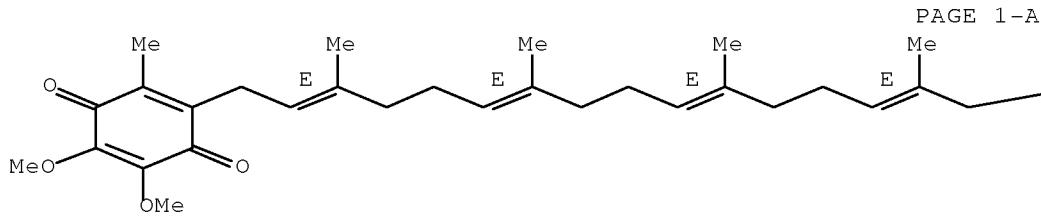
IT 59-05-2, Methotrexate 59-30-3, Folic acid, biological studies
 303-98-0, Coenzyme Q10 359-83-1, Pentazocin 9004-10-8,
 Insulin, biological studies 10238-21-8, Glibenclamide 12001-76-2,
 Vitamin B complex 54965-24-1, Tamoxifen citrate
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (delivery system containing Shilajit for pharmaceuticals and nutrition and cosmetics)

IT 303-98-0, Coenzyme Q10
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (delivery system containing Shilajit for pharmaceuticals and nutrition and cosmetics)

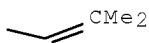
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CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-
 3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-
 tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD
 (4 CITINGS)
 REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 17 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2003:202513 ZCPLUS Full-text
 DOCUMENT NUMBER: 138:226402
 TITLE: A topical water-in-oil emulsion composition
 INVENTOR(S): Fischer, Andreas
 PATENT ASSIGNEE(S): Lipocore Holding AB, Swed.
 SOURCE: PCT Int. Appl., 33 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003020318	A1	20030313	WO 2002-SE1571	20020903 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002330820	A1	20030318	AU 2002-330820	20020903 <--
PRIORITY APPLN. INFO.:			SE 2001-2933	A 20010904 <--
			SE 2002-1667	A 20020603 <--
			WO 2002-SE1571	W 20020903 <--

AB The present invention refers to a topical water-in-oil (w/o)-emulsion composition for cosmetic or medical use, comprising an oil phase and an aqueous phase dispersed in the continuous oil phase in a w/o ratio of up to 80:20, resp. The oil phase contains 60-99.9% of at least one non-polar oil in combination with 0.1-40% of monoglycosylceramide, and optionally ethanol. The composition is able to form a macroscopically homogeneous and stable w/o emulsion. For example, to the oil phase prepared from 0.0591 g of monohexosylceramide mixed with 0.9992 g of evening primrose oil and 0.1209 g of ethanol, 0.7885 g of water was added to form the emulsion.

IC ICM A61K047-44
 ICS A61K009-113

CC 62-4 (Essential Oils and Cosmetics)
 Section cross-reference(s): 63

ST monoglycosylceramide oil topical emulsion cosmetic medical

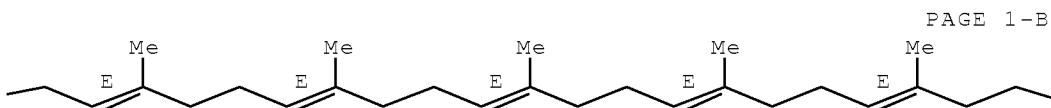
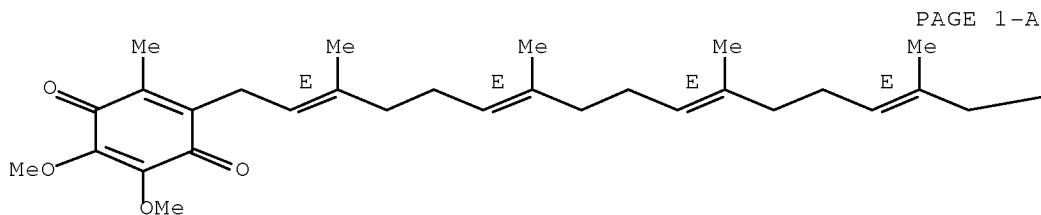
IT Acne
 Psoriasis
 Seborrhea
 (agents for treatment of; topical water-in-oil emulsions containing non-polar oil and monoglycosylceramide for cosmetic or medical use)

IT Cosmetics
 (creams; topical water-in-oil emulsions containing non-polar oil and monoglycosylceramide for cosmetic or medical use)

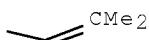
- IT Cerebrosides
 - RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (emulsifiers; topical water-in-oil emulsions containing non-polar oil and monoglycosylceramide for cosmetic or medical use)
- IT Drug delivery systems
 - (emulsions, topical; topical water-in-oil emulsions containing non-polar oil and monoglycosylceramide for cosmetic or medical use)
- IT Cosmetics
 - (emulsions; topical water-in-oil emulsions containing non-polar oil and monoglycosylceramide for cosmetic or medical use)
- IT Fats and Glyceridic oils, biological studies
 - RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (evening primrose; topical water-in-oil emulsions containing non-polar oil and monoglycosylceramide for cosmetic or medical use)
- IT Fats and Glyceridic oils, biological studies
 - RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (fish; topical water-in-oil emulsions containing non-polar oil and monoglycosylceramide for cosmetic or medical use)
- IT Hair preparations
 - (growth stimulants; topical water-in-oil emulsions containing non-polar oil and monoglycosylceramide for cosmetic or medical use)
- IT Cerebrosides
 - RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (hexose-containing; topical water-in-oil emulsions containing non-polar oil and monoglycosylceramide for cosmetic or medical use)
- IT Cosmetics
 - Drug delivery systems
 - (lotions; topical water-in-oil emulsions containing non-polar oil and monoglycosylceramide for cosmetic or medical use)
- IT Glycerides, biological studies
 - RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (medium-chain, oils; topical water-in-oil emulsions containing non-polar oil and monoglycosylceramide for cosmetic or medical use)
- IT Milk
 - (monohexosylceramides from; topical water-in-oil emulsions containing non-polar oil and monoglycosylceramide for cosmetic or medical use)
- IT Drug delivery systems
 - (ointments, creams; topical water-in-oil emulsions containing non-polar oil and monoglycosylceramide for cosmetic or medical use)
- IT Drug delivery systems
 - (ointments; topical water-in-oil emulsions containing non-polar oil and monoglycosylceramide for cosmetic or medical use)
- IT Fats and Glyceridic oils, biological studies
 - RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 - (sesame; topical water-in-oil emulsions containing non-polar oil and monoglycosylceramide for cosmetic or medical use)
- IT Anesthetics
 - Anti-inflammatory agents
 - Antibiotics
 - Antimicrobial agents
 - Antitumor agents
 - Antiviral agents

Cosmetics
 Emulsifying agents
 Fungicides
 Insecticides
 (topical water-in-oil emulsions containing non-polar oil and
 monoglycosylceramide for cosmetic or medical use)
 IT Coconut oil
 Corn oil
 Fats and Glyceridic oils, biological studies
 Hydrocarbon oils
 Soybean oil
 Sunflower oil
 RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study);
 USES (Uses)
 (topical water-in-oil emulsions containing non-polar oil and
 monoglycosylceramide for cosmetic or medical use)
 IT Amino acids, biological studies
 Hormones, animal, biological studies
 Lipids, biological studies
 Mineral elements, biological studies
 Peptides, biological studies
 Proteins
 Steroids, biological studies
 Vitamins
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (topical water-in-oil emulsions containing non-polar oil and
 monoglycosylceramide for cosmetic or medical use)
 IT 50-21-5, Lactic acid, biological studies 50-81-7, Ascorbic acid,
 biological studies 56-81-5, Glycerol, biological studies 57-13-6,
 Carbamide, biological studies 59-02-9, α -Tocopherol 64-17-5,
 Ethanol, biological studies 303-98-0, Coenzyme Q10 443-48-1,
 Metronidazole 85305-87-9, Glucosylceramide 85305-88-0,
 Galactosylceramide
 RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological
 study); USES (Uses)
 (topical water-in-oil emulsions containing non-polar oil and
 monoglycosylceramide for cosmetic or medical use)
 IT 55-16-3, Scopolamine hydrochloride 58-56-0, Pyridoxine hydrochloride
 93-60-7, Methyl nicotinate 5451-09-2, Aminolevulinic acid hydrochloride
 16090-09-8, Lithium succinate 22839-47-0, Aspartame
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (topical water-in-oil emulsions containing non-polar oil and
 monoglycosylceramide for cosmetic or medical use)
 IT 303-98-0, Coenzyme Q10
 RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological
 study); USES (Uses)
 (topical water-in-oil emulsions containing non-polar oil and
 monoglycosylceramide for cosmetic or medical use)
 RN 303-98-0 ZCAPLUS
 CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-
 3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-
 tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 18 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN
 ACCESSION NUMBER: 2003:454875 ZCPLUS Full-text
 DOCUMENT NUMBER: 139:38559
 TITLE: Coated particles, their manufacture and use
 INVENTOR(S): Anderson, David M.
 PATENT ASSIGNEE(S): Lyotropic Therapeutics, Inc., USA
 SOURCE: U.S. Pat. Appl. Publ., 65 pp., Cont.-in-part of U.S. Ser. No. 297,997.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20030108743	A1	20030612	US 2002-170237	20020613 <--
US 6638621	B2	20031028		
US 6482517	B1	20021119	US 2000-297997	20000816 <--
US 20040201117	A1	20041014	US 2003-624498	20030723 <--
US 6989195	B2	20060124		
US 20060073333	A1	20060406	US 2004-11956	20041215 <--
US 7105229	B2	20060912		
PRIORITY APPLN. INFO.:			US 2000-297997	A2 20000816 <--
			US 1997-58309P	P 19970909 <--
			WO 1998-US18639	W 19980908 <--
			US 2002-170237	A1 20020613 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A particle coated with a nonlamellar material such as a nonlamellar crystalline material, a nonlamellar amorphous material, or a nonlamellar semi-crystalline material includes an internal matrix core having ≥1 a nanostructured liquid phase or its dehydrated variant, or ≥1 nanostructured liquid crystalline phase or its dehydrated variant, or a combination of the 2 is used for the delivery of active agents such as pharmaceuticals, nutrients, pesticides, etc. The coated particle can be fabricated by a variety of different techniques where the exterior coating is a nonlamellar material such as a nonlamellar crystalline material, a nonlamellar amorphous material, or a nonlamellar semi-crystalline material.

IC ICM B32B005-16

INCL 428402240

CC 48-3 (Unit Operations and Processes)

Section cross-reference(s): 5, 18, 41, 60, 63

IT Antihypertensives
Antitumor agents

Drugs

Dyes

Herbicides

Pesticides

Rodenticides

(microencapsulated; coated particles for delivery or uptake of materials)

IT Drug delivery systems

(topical; coated particles for delivery or uptake of materials)

IT 58-27-5, Menadione 303-98-0, Coenzyme Q10

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coated particles for delivery or uptake of materials)

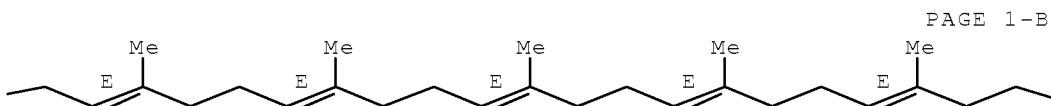
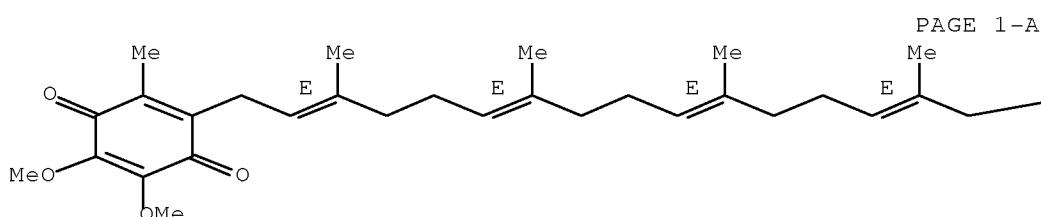
IT 303-98-0, Coenzyme Q10

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(coated particles for delivery or uptake of materials)

RN 303-98-0 ZCPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



~~~ CMe2

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD  
(7 CITINGS)

L88 ANSWER 19 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2003:435298 ZCPLUS Full-text  
 DOCUMENT NUMBER: 139:26624  
 TITLE: Nutritional supplements containing antioxidants and  
       flavonoids for prevention, reduction and treatment of  
       radiation injury  
 INVENTOR(S): Rosenbloom, Richard A.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 14 pp., Cont.-in-part of U.S.  
       Ser. No. 45,790.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

| PATENT NO.                                                                                                                                                                                                                                                                                                                                                                           | KIND | DATE     | APPLICATION NO. | DATE         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|--------------|
| US 20030105027                                                                                                                                                                                                                                                                                                                                                                       | A1   | 20030605 | US 2002-132642  | 20020425 <-- |
| US 20030103953                                                                                                                                                                                                                                                                                                                                                                       | A1   | 20030605 | US 2001-993003  | 20011106 <-- |
| US 6753325                                                                                                                                                                                                                                                                                                                                                                           | B2   | 20040622 |                 |              |
| US 20030103954                                                                                                                                                                                                                                                                                                                                                                       | A1   | 20030605 | US 2002-45790   | 20020114 <-- |
| US 7435725                                                                                                                                                                                                                                                                                                                                                                           | B2   | 20081014 |                 |              |
| CA 2465945                                                                                                                                                                                                                                                                                                                                                                           | A1   | 20030515 | CA 2002-2465945 | 20020501 <-- |
| WO 2003039452                                                                                                                                                                                                                                                                                                                                                                        | A2   | 20030515 | WO 2002-US13526 | 20020501 <-- |
| WO 2003039452                                                                                                                                                                                                                                                                                                                                                                        | A3   | 20041202 |                 |              |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,<br>CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,<br>GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,<br>LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,<br>PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,<br>UA, UG, US, UZ, VN, YU, ZA, ZM, ZW |      |          |                 |              |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,<br>CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,<br>BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG                                                                                                                                                                             |      |          |                 |              |
| AU 2002309615                                                                                                                                                                                                                                                                                                                                                                        | A1   | 20030519 | AU 2002-309615  | 20020501 <-- |
| AU 2002309615                                                                                                                                                                                                                                                                                                                                                                        | B2   | 20071018 |                 |              |
| EP 1505984                                                                                                                                                                                                                                                                                                                                                                           | A2   | 20050216 | EP 2002-736624  | 20020501 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO, MK, CY, AL, TR                                                                                                                                                                                                                                                                         |      |          |                 |              |
| JP 2005510509                                                                                                                                                                                                                                                                                                                                                                        | T    | 20050421 | JP 2003-541744  | 20020501 <-- |
| CN 1630521                                                                                                                                                                                                                                                                                                                                                                           | A    | 20050622 | CN 2002-822057  | 20020501 <-- |
| NZ 532774                                                                                                                                                                                                                                                                                                                                                                            | A    | 20080829 | NZ 2002-532774  | 20020501 <-- |
| US 20030105031                                                                                                                                                                                                                                                                                                                                                                       | A1   | 20030605 | US 2002-279315  | 20021024 <-- |
| CA 2465888                                                                                                                                                                                                                                                                                                                                                                           | A1   | 20030626 | CA 2002-2465888 | 20021106 <-- |
| US 20030118536                                                                                                                                                                                                                                                                                                                                                                       | A1   | 20030626 | US 2002-288761  | 20021106 <-- |

|                        |                                                                                                                                                                                                                                                                                                                                                                        |          |                 |                 |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------|-----------------|
| WO 2003051287          | A2                                                                                                                                                                                                                                                                                                                                                                     | 20030626 | WO 2002-US35701 | 20021106 <--    |
| WO 2003051287          | A3                                                                                                                                                                                                                                                                                                                                                                     | 20050414 |                 |                 |
| W:                     | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW |          |                 |                 |
| RW:                    | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG                                                                                                                     |          |                 |                 |
| AU 2002365155          | A1                                                                                                                                                                                                                                                                                                                                                                     | 20030630 | AU 2002-365155  | 20021106 <--    |
| AU 2002365155          | B2                                                                                                                                                                                                                                                                                                                                                                     | 20071018 |                 |                 |
| EP 1536801             | A2                                                                                                                                                                                                                                                                                                                                                                     | 20050608 | EP 2002-803307  | 20021106 <--    |
| R:                     | AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY, TR, BG, CZ, EE, SK                                                                                                                                                                                                                                                                         |          |                 |                 |
| CN 1635907             | A                                                                                                                                                                                                                                                                                                                                                                      | 20050706 | CN 2002-826541  | 20021106 <--    |
| JP 2005528333          | T                                                                                                                                                                                                                                                                                                                                                                      | 20050922 | JP 2003-552220  | 20021106 <--    |
| NZ 532775              | A                                                                                                                                                                                                                                                                                                                                                                      | 20061027 | NZ 2002-532775  | 20021106 <--    |
| IN 2004DN01160         | A                                                                                                                                                                                                                                                                                                                                                                      | 20060728 | IN 2004-DN1160  | 20040430 <--    |
| IN 2004DN01165         | A                                                                                                                                                                                                                                                                                                                                                                      | 20060728 | IN 2004-DN1165  | 20040430 <--    |
| MX 2004004376          | A                                                                                                                                                                                                                                                                                                                                                                      | 20040811 | MX 2004-4376    | 20040506 <--    |
| MX 2004004377          | A                                                                                                                                                                                                                                                                                                                                                                      | 20040811 | MX 2004-4377    | 20040506 <--    |
| PRIORITY APPLN. INFO.: |                                                                                                                                                                                                                                                                                                                                                                        |          | US 2001-993003  | A2 20011106 <-- |
|                        |                                                                                                                                                                                                                                                                                                                                                                        |          | US 2002-45790   | A2 20020114 <-- |
|                        |                                                                                                                                                                                                                                                                                                                                                                        |          | US 2002-132642  | A 20020425 <--  |
|                        |                                                                                                                                                                                                                                                                                                                                                                        |          | WO 2002-US13526 | W 20020501 <--  |
|                        |                                                                                                                                                                                                                                                                                                                                                                        |          | WO 2002-US35701 | W 20021106 <--  |

## ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB A nutritional supplement composition for the prevention, reduction or treatment of radiation injury due to exposure to ionizing radiation, including one or more compds. that regulates cell differentiation and/or cell proliferation, and one or more antioxidants, optionally formulated in a pharmaceutically acceptable carrier for an oral composition is described. The composition of the present invention may further include optional ingredients such as flavonoids, flavonoid derivs., selenium, selenium compds., anti-inflammatories, organic germanium, Korean ginseng, American ginseng, Siberian ginseng and B-complex vitamins. A method for the administration of an oral composition for the purpose of preventing, reducing or treating radiation injury involves orally administering an effective amount of a composition including one or more compds. that regulates cell differentiation and/or cell proliferation, and one or more antioxidants to a person before, during or after radiation exposure. A method for the topical administration of the composition in accordance with the present invention for the purpose of preventing, reducing or treating radiation injury involves topically administering an effective amount of the composition of the invention an area of skin, which has been or will be exposed to ionizing radiation. The compns. and methods can be employed to prevent, reduce or treat radiation injury caused by a wide variety of types of radiation exposure. For example, an oral composition, e.g. a tablet, contained vitamin A palmitate 10,000 IU, vitamin D 400 IU, β-carotene 15,000 IU, vitamin E 400 IU, α-lipoic acid 150 mg, quercetin 1200 mg, ascorbyl palmitate 500 mg, curcumin 15 mg, green tea extract 20 mg, chlorophyllin 200 mg, carboxyethyl sesquioxide of germanium 100 mg, and superoxide dismutase 1125 µg. This oral composition can be administered 1-5 times daily for the prevention, reduction or treatment of radiation injury prior to, during or after radiation exposure.

IC ICM A61K038-05

ICS A61K031-7048; A61K031-59; A61K031-375; A61K031-353; A61K035-78;  
A61K031-07; A61K031-355

INCL 514018000; 424094100; 424729000; 514168000; 514456000; 514440000;  
 514474000; 514027000; 514458000; 514725000  
 CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 8, 18, 62  
 IT Anti-inflammatory agents  
 Antioxidants  
 Cell differentiation  
 Cell proliferation  
 Radioprotectants  
 (nutritional supplements containing antioxidants and regulators of cell differentiation and/or proliferation for prevention, reduction and treatment of radiation injury)  
 IT Drug delivery systems  
 (topical; compns. containing antioxidants and regulators of cell differentiation and/or differentiation for prevention, reduction and treatment of radiation injury)  
 IT 50-81-7, L-Ascorbic acid, biological studies 58-95-7, Vitamin E acetate 70-18-8, Glutathione, biological studies 87-44-5, Caryophyllene 90-18-6, Quercetagetin 90-19-7, Rhamnetin 117-39-5, Quercetin 120-72-9, Indole, biological studies 137-66-6, Ascorbyl palmitate 142-50-7, Nerolidol 152-95-4, Sophoricoside 153-18-4, Rutin 303-98-0, Coenzyme Q10 446-72-0, Genistein 458-37-7, Curcumin 474-07-7, Brazilin 476-66-4, Ellagic acid 480-10-4, Astragalalin 480-16-0, Morin 480-36-4, Linarin 480-40-0, Chrysin 480-41-1, Naringenin 480-44-4, Acacetin 482-36-0, Hyperin 482-39-3, Kaempferol-3-rhamnoside 483-76-1, δ-Cadinene 490-83-5, Dehydroascorbic acid 491-50-9, Quercimeritrin 491-67-8, Baicalein 491-70-3, Luteolin 491-71-4, Chrysoeriol 506-26-3, γ-Linolenic acid 517-28-2, Haematoxylin 520-11-6, Nepetin 520-12-7, Pectolinarigenin 520-18-3, Kaempferol 520-26-3, Hesperidine 520-33-2, Hesperitin 520-34-3, Diosmetin 520-36-5, Apigenin 522-12-3, Quercitrin 528-48-3, Fisetin 528-58-5, Cyanidin 529-44-2, Myricetin 548-83-4, Galangin 549-17-7, Oxyayanin-a 549-32-6, Reynoutrin 569-90-4, Nepetrin 572-30-5, Avicularin 578-74-5, Cosmosin 603-56-5, Chrysosplenol B 632-85-9, Wogonin 652-78-8 961-29-5, Isoliquiritigenin 1200-22-2, α-Lipoic acid 1340-08-5, Citrin 1406-18-4, Vitamin E 1617-49-8, 3,3',4-Tri-O-methylellagic acid 1617-53-4, Amentoflavone 3681-93-4, Vitexin 4172-43-4, L-Lyxonic acid 4172-44-5, L-Xyloonic acid 5041-67-8, Juglanin 5041-81-6, Isoliquiritin 5188-73-8, Axillarin 5373-11-5, Luteolin-7-glucoside 6601-54-3 7306-96-9, L-Threonic acid 7306-96-9D, L-Threonic acid, salts 7440-56-4, Germanium, biological studies 7782-49-2, Selenium, biological studies 9054-89-1, Superoxide dismutase 10236-47-2, Naringin 11103-57-4, Vitamin A 12001-76-2, Vitamin B 12758-40-6, Carboxyethylgermanium sesquioxide 17306-46-6, Rhoifolin 17680-84-1, Hispiduloside 17912-87-7 18003-33-3, 6-Hydroxyluteolin 18490-95-4, Brevifolin carboxylic acid 19356-17-3, 25-Hydroxycholecalciferol 20229-56-5, Spiraeoside 21637-25-2, Isoquercitrin 22697-65-0, 6-Hydroxykaempferol-3,6-dimethyl ether 23615-30-7, Chrysosplenoside-a 23627-87-4, Trifolin 24512-68-3, Sorbarin 25321-00-0, Chrysosplenoside d 25694-72-8, Lonicerin 26544-34-3, Apiin 28978-02-1, Pectolinarin 29741-10-4, Luteolin 7-glucuronide 29913-71-1, Licuraside 32222-06-3, Calcitriol 32602-81-6, Kaempferol-3-neohesperidoside 53755-56-9, Linariin 60534-79-4 61276-17-3, Acteoside 61360-94-9, Flavosativaside 61891-39-2 64661-76-3 65666-07-1, Silymarin 67255-34-9, Iridine 70360-12-2, Sideritoflavone 79886-50-3 84632-09-7, 6,3',4'-Trihydroxy-5,7,8-trimethoxyflavone 94492-24-7 97560-11-7, Kolaviron 107646-82-2, Ethyl brevifolin carboxylate 120444-60-2, Jionoside al 125712-75-6 132951-90-7, Macrocarpal-a

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524729-83-7, Nelumboside 536737-05-0 537684-20-1, Dosmetin  
537684-31-4, Ebinin

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(nutritional supplements containing antioxidants and regulators of cell  
differentiation and/or differentiation for prevention, reduction and  
treatment of radiation injury)

IT 303-98-0, Coenzyme Q10

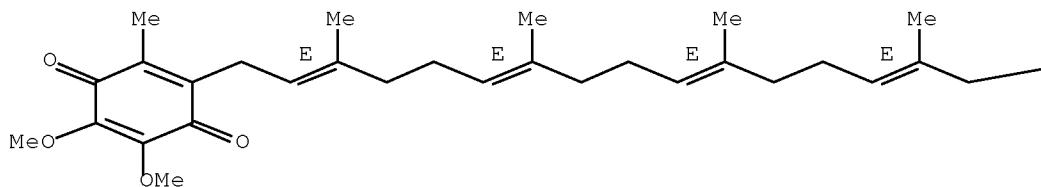
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differentiation and/or differentiation for prevention, reduction and  
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RN 303-98-0 ZCPLUS

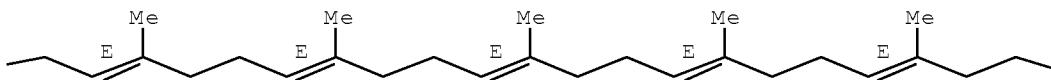
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Double bond geometry as shown.

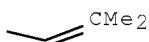
PAGE 1-A



PAGE 1-B



PAGE 1-C



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L88 ANSWER 20 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2003:435063 ZCPLUS Full-text

DOCUMENT NUMBER: 139:26623

TITLE: Oral compositions containing antioxidants and  
flavonoids for prevention, reduction and treatment of  
radiation injury

INVENTOR(S): Rosenbloom, Richard A.

PATENT ASSIGNEE(S): The Quigly Corporation, USA  
 SOURCE: U.S. Pat. Appl. Publ., 13 pp., Cont.-in-part of U.S.  
 Ser. No. 993,003.  
 CODEN: USXXCO

DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 5  
 PATENT INFORMATION:

| PATENT NO.                                                                                                                                                                                                                                                                                                                                                                               | KIND | DATE     | APPLICATION NO. | DATE         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|--------------|
| US 20030103954                                                                                                                                                                                                                                                                                                                                                                           | A1   | 20030605 | US 2002-45790   | 20020114 <-- |
| US 7435725                                                                                                                                                                                                                                                                                                                                                                               | B2   | 20081014 |                 |              |
| US 20030103953                                                                                                                                                                                                                                                                                                                                                                           | A1   | 20030605 | US 2001-993003  | 20011106 <-- |
| US 6753325                                                                                                                                                                                                                                                                                                                                                                               | B2   | 20040622 |                 |              |
| US 20030105027                                                                                                                                                                                                                                                                                                                                                                           | A1   | 20030605 | US 2002-132642  | 20020425 <-- |
| CA 2465945                                                                                                                                                                                                                                                                                                                                                                               | A1   | 20030515 | CA 2002-2465945 | 20020501 <-- |
| WO 2003039452                                                                                                                                                                                                                                                                                                                                                                            | A2   | 20030515 | WO 2002-US13526 | 20020501 <-- |
| WO 2003039452                                                                                                                                                                                                                                                                                                                                                                            | A3   | 20041202 |                 |              |
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| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,<br>CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,<br>BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG                                                                                                                                                                                 |      |          |                 |              |
| AU 2002309615                                                                                                                                                                                                                                                                                                                                                                            | A1   | 20030519 | AU 2002-309615  | 20020501 <-- |
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| EP 1505984                                                                                                                                                                                                                                                                                                                                                                               | A2   | 20050216 | EP 2002-736624  | 20020501 <-- |
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| JP 2005510509                                                                                                                                                                                                                                                                                                                                                                            | T    | 20050421 | JP 2003-541744  | 20020501 <-- |
| CN 1630521                                                                                                                                                                                                                                                                                                                                                                               | A    | 20050622 | CN 2002-822057  | 20020501 <-- |
| NZ 532774                                                                                                                                                                                                                                                                                                                                                                                | A    | 20080829 | NZ 2002-532774  | 20020501 <-- |
| US 20030105031                                                                                                                                                                                                                                                                                                                                                                           | A1   | 20030605 | US 2002-279315  | 20021024 <-- |
| CA 2465888                                                                                                                                                                                                                                                                                                                                                                               | A1   | 20030626 | CA 2002-2465888 | 20021106 <-- |
| US 20030118536                                                                                                                                                                                                                                                                                                                                                                           | A1   | 20030626 | US 2002-288761  | 20021106 <-- |
| WO 2003051287                                                                                                                                                                                                                                                                                                                                                                            | A2   | 20030626 | WO 2002-US35701 | 20021106 <-- |
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| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,<br>KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,<br>FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,<br>CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG                                                                                                                          |      |          |                 |              |
| AU 2002365155                                                                                                                                                                                                                                                                                                                                                                            | A1   | 20030630 | AU 2002-365155  | 20021106 <-- |
| AU 2002365155                                                                                                                                                                                                                                                                                                                                                                            | B2   | 20071018 |                 |              |
| EP 1536801                                                                                                                                                                                                                                                                                                                                                                               | A2   | 20050608 | EP 2002-803307  | 20021106 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, FI, CY, TR, BG, CZ, EE, SK                                                                                                                                                                                                                                                                                     |      |          |                 |              |
| CN 1635907                                                                                                                                                                                                                                                                                                                                                                               | A    | 20050706 | CN 2002-826541  | 20021106 <-- |
| JP 2005528333                                                                                                                                                                                                                                                                                                                                                                            | T    | 20050922 | JP 2003-552220  | 20021106 <-- |
| NZ 532775                                                                                                                                                                                                                                                                                                                                                                                | A    | 20061027 | NZ 2002-532775  | 20021106 <-- |
| IN 2004DN01160                                                                                                                                                                                                                                                                                                                                                                           | A    | 20060728 | IN 2004-DN1160  | 20040430 <-- |

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| IN 2004DN01165         | A | 20060728 | IN 2004-DN1165  | 20040430 <--    |
| ZA 2004003364          | A | 20061025 | ZA 2004-3364    | 20040504 <--    |
| MX 2004004376          | A | 20040811 | MX 2004-4376    | 20040506 <--    |
| MX 2004004377          | A | 20040811 | MX 2004-4377    | 20040506 <--    |
| ZA 2004003365          | A | 20060531 | ZA 2004-3365    | 20060328 <--    |
| PRIORITY APPLN. INFO.: |   |          | US 2001-993003  | A2 20011106 <-- |
|                        |   |          | US 2002-45790   | A2 20020114 <-- |
|                        |   |          | US 2002-132642  | A 20020425 <--  |
|                        |   |          | WO 2002-US13526 | W 20020501 <--  |
|                        |   |          | WO 2002-US35701 | W 20021106 <--  |

## ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB An oral composition for the prevention, reduction or treatment of radiation injury including one or more compds. that regulates cell differentiation and/or cell proliferation, and one or more antioxidants, optionally formulated in a pharmaceutically acceptable carrier for an oral composition. The composition of the present invention may further include optional ingredients such as flavonoids, flavonoid derivs., selenium, selenium compds., anti-inflammatories, organic germanium, Korean ginseng, American ginseng, Siberian ginseng and B-complex vitamins. A method for the administration of an oral composition for the purpose of preventing, reducing or treating radiation injury involves orally administering an effective amount of a composition including one or more compds. that regulates cell differentiation and/or cell proliferation, and one or more antioxidants to a person before, during or after radiation exposure. The compns. and methods can be employed to prevent, reduce or treat radiation injury caused by a wide variety of types of radiation exposure. For example, an oral composition, e.g., a tablet, contained vitamin A palmitate and D3 in corn oil dispersion 10,000 IU of vitamin A, β-carotene 15,000 IU, vitamin E 400 IU, α-lipoic acid 150 mg, quercetin 1200 mg, ascorbyl palmitate 500 mg, curcumin 15 mg, green tea extract 20 mg, chlorophyllin 200 mg, germanium carboxyethyl sesquioxide 100 mg, and superoxide dismutase 1125 µg. This oral composition can be administered 1-5 times daily for the prevention, reduction or treatment of radiation injury prior to, during or after radiation exposure.

IC ICM A61K038-43  
 ICS A61K038-05; A61K031-355; A61K035-78; A61K031-59

INCL 424094100; X51-4 1.8; X42-472.9; X51-416.8; X51-445.6; X51-447.4;  
 X51-445.8; X51-472.5; X51-441.0; X51-444.0

CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 8, 62

ST antioxidant flavonoid germanium selenium ginseng oral radioprotection;  
 cell differentiation proliferation regulation oral topical radiotherapy

IT Anti-inflammatory agents  
 Antioxidants  
 Cell differentiation  
 Cell proliferation  
 Radioprotectants  
 Radiotherapy  
 (oral compns. containing antioxidant, and regulator of cell differentiation and/or proliferation for prevention, reduction and treatment of radiation injury)

IT Drug delivery systems  
 (topical; compns. containing antioxidant, and regulator of cell differentiation and/or proliferation for prevention, reduction and treatment of radiation injury)

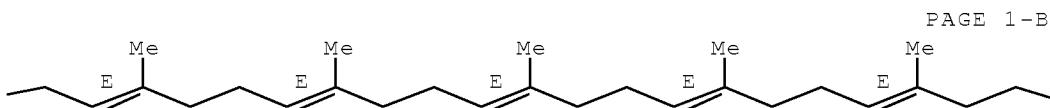
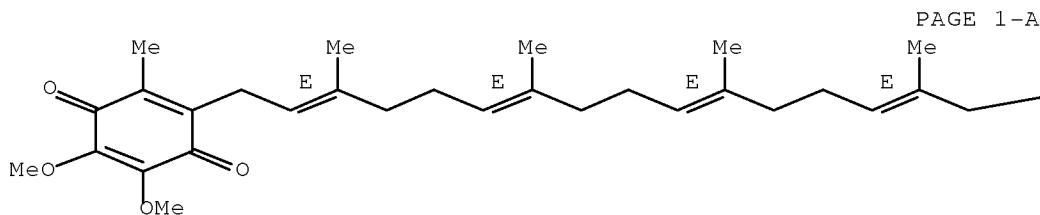
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120-72-9, Indole, biological studies 137-66-6, Ascorbyl palmitate  
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 474-07-7, Brazilin 476-66-4, Ellagic acid 480-10-4, Astragalin  
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 Isoliquiritigenin 1200-22-2, α-Lipoic acid 1340-08-5, Citrin  
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 ether 23615-30-7, Chrysosplenoside a 23627-87-4, Trifolin  
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 Lonicerin 26544-34-3, Apiin 28978-02-1, Pectolinarin 29741-10-4,  
 Luteolin-7-glucuronide 29913-71-1, Licuraside 32222-06-3,  
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 61276-17-3, Acteoside 61360-94-9, Flavosativiaside 61891-39-2  
 64661-76-3, Flavocannabiside 65666-07-1, Silymarin 67255-34-9, Iridine  
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 6,3',4'-Trihydroxy-5,7,8-trimethoxyflavone 94492-24-7,  
 2'-Acetylacteoside 97560-11-7, Kolaviron 107646-82-2, Ethyl brevifolin  
 carboxylate 120444-60-2, Jionoside a1 125712-75-6 132951-90-7,  
 Macrocarpal-a 142628-53-3, Macrocarpal-g 142647-71-0, Macrocarpal d  
 142698-60-0, Macrocarpal-b 439217-49-9 524689-97-2 524727-65-9,  
 Maniflavone 524729-83-7, Nelumboside 536737-05-0 537684-20-1,  
 Dosmetin 537684-31-4, Ebinin  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (oral compns. containing antioxidant, and regulator of cell differentiation  
 and/or proliferation for prevention, reduction and treatment of radiation  
 injury)

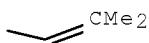
IT 303-98-0, Coenzyme Q10  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (oral compns. containing antioxidant, and regulator of cell differentiation  
 and/or proliferation for prevention, reduction and treatment of radiation  
 injury)

RN 303-98-0 ZCAPLUS  
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 3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-  
 tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)  
REFERENCE COUNT: 202 THERE ARE 202 CITED REFERENCES AVAILABLE FOR  
THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE  
FORMAT

L88 ANSWER 21 OF 41 ZCAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2003:488554 ZCAPLUS Full-text  
DOCUMENT NUMBER: 139:30864  
TITLE: Coenzyme Q10 for the treatment of ocular diseases  
INVENTOR(S): Brancato, Rosario; Lenaz, Giorgio; Capaccioli, Sergio;  
Schiavone, Nicola  
PATENT ASSIGNEE(S): Simonelli, Giuseppe, Italy  
SOURCE: Eur. Pat. Appl., 31 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.                                                                                                                   | KIND | DATE     | APPLICATION NO. | DATE         |
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| EP 1321138                                                                                                                   | A1   | 20030625 | EP 2002-425777  | 20021217 <-- |
| EP 1321138                                                                                                                   | B1   | 20060412 |                 |              |
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| IT 2001RM0755                                                                                                                | A1   | 20030620 | IT 2001-RM755   | 20011220 <-- |
| AT 322895                                                                                                                    | T    | 20060415 | AT 2002-425777  | 20021217 <-- |
| ES 2262777                                                                                                                   | T3   | 20061201 | ES 2002-425777  | 20021217 <-- |

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|----------------|----|----------|----------------|----------------|
| US 20030118576 | A1 | 20030626 | US 2002-323820 | 20021220 <--   |
| US 7029672     | B2 | 20060418 | IT 2001-RM755  | A 20011220 <-- |

## PRIORITY APPLN. INFO.:

## ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The invention relates to the use of Coenzyme Q10 or functionally equivalent derivs. thereof, through topical or systemic administration, for the prevention, the treatment and/or attenuation of degenerative ocular pathologies, when said pathologies being of an heredofamilial, inflammatory, dysmetabolic, senile age-related nature, the degenerative process deriving from apoptotic events caused by hypoxia or other detrimental stimuli due to ischemia or to the lack of trophic factors.

IC ICM A61K031-122

ICS A61P027-02

CC 1-12 (Pharmacology)

Section cross-reference(s): 7, 14, 63

ST Coenzyme Q10 cytoprotectant topical systemic aging ocular neurodegenerative disease; heredofamilial inflammatory dysmetabolic senile ocular disease Coenzyme Q10 cytoprotectant; glaucoma topical CoenzymeQ10 hypoxia ischemia ocular neurodegenerative disease model

IT Eye, neoplasm

(retinoblastoma; treatment of ocular diseases with Coenzyme Q10)

IT Drug delivery systems

(solns., topical; treatment of ocular diseases with Coenzyme Q10)

IT 303-98-0, Coenzyme Q10 303-98-0D, Coenzyme Q10, deriv

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(treatment of ocular diseases with Coenzyme Q10)

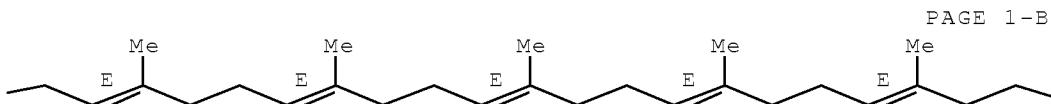
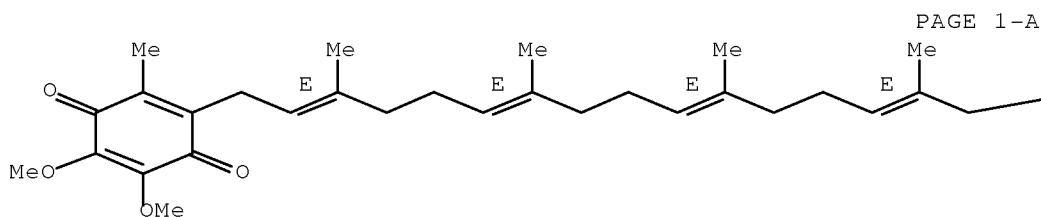
IT 303-98-0, Coenzyme Q10 303-98-0D, Coenzyme Q10, deriv

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(treatment of ocular diseases with Coenzyme Q10)

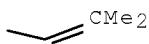
RN 303-98-0 ZCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



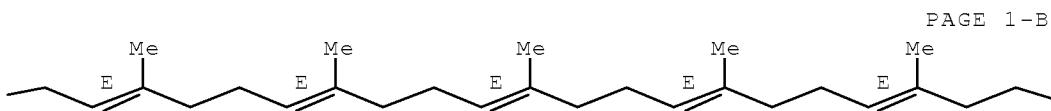
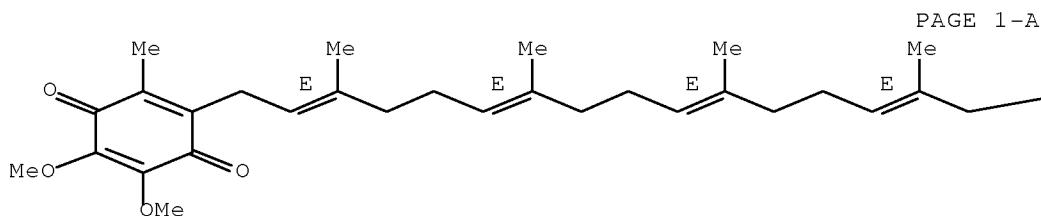
PAGE 1-C



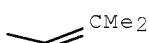
RN 303-98-0 ZCPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[ (2E,6E,10E,14E,18E,22E,26E,30E,34E)-  
3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-  
tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 22 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:832565 ZCPLUS Full-text

DOCUMENT NUMBER: 137:329452

TITLE: Compositions with a non-glucocorticoid steroid and/or  
a ubiquinone and kit for treatment of respiratory and  
lung disease

INVENTOR(S): Nyce, Jonathan W.  
 PATENT ASSIGNEE(S): Epigenesis Pharmaceuticals, Inc., USA  
 SOURCE: PCT Int. Appl., 51 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

| PATENT NO.                                                                                                                                                                                                                                                                                                                                                            | KIND                                                                                                                                                                                                                                   | DATE     | APPLICATION NO. | DATE            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------|-----------------|
| WO 2002085297                                                                                                                                                                                                                                                                                                                                                         | A2                                                                                                                                                                                                                                     | 20021031 | WO 2002-US12555 | 20020422 <--    |
| WO 2002085297                                                                                                                                                                                                                                                                                                                                                         | A3                                                                                                                                                                                                                                     | 20030403 |                 |                 |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG |          |                 |                 |
| AU 2002303427                                                                                                                                                                                                                                                                                                                                                         | A1                                                                                                                                                                                                                                     | 20021105 | AU 2002-303427  | 20020422 <--    |
| US 20040082522                                                                                                                                                                                                                                                                                                                                                        | A1                                                                                                                                                                                                                                     | 20040429 | US 2003-454061  | 20030603 <--    |
| US 7456161                                                                                                                                                                                                                                                                                                                                                            | B2                                                                                                                                                                                                                                     | 20081125 |                 |                 |
| US 20080292709                                                                                                                                                                                                                                                                                                                                                        | A1                                                                                                                                                                                                                                     | 20081127 | US 2008-172033  | 20080711 <--    |
| PRIORITY APPLN. INFO.:                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                        |          | US 2001-286124P | P 20010424 <--  |
|                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                        |          | WO 2002-US12555 | W 20020422 <--  |
|                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                        |          | US 2003-454061  | A3 20030603 <-- |

## ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 137:329452

AB A pharmaceutical or veterinary composition comprises as the active agent (i) a non-glucocorticoid steroid or its analog, and (ii) a ubiquinone or their salts, in an amount effective for reducing levels of, or hypersensitivity to, adenosine, increasing levels of lung surfactant or ubiquinone, or for preventing or treating respiratory, lung and cancer diseases. The present treatment is useful for treating asthma, rhinitis, COPD, CF, RDS, pulmonary fibrosis, cancer and other diseases. For example, a metered dose inhaler contained ubiquinone 200 mg, dehydroepiandrosterone (DHEA) 200 mg, a stabilizer 5.0 µg, trichlorofluoromethane 23.70 mg, and dichlorodifluoromethane 61.25 mg.

IC ICM A61K

CC 63-6 (Pharmaceuticals)

Section cross-reference(s): 1, 2

ST steroid ubiquinone oral parenteral topical respiratory disease

IT Allergy

Antitumor agents

Asthma

Cell cycle

Cell proliferation

Cystic fibrosis

Freeze drying

Iontophoresis

Lung, disease

Neoplasm

Respiratory distress syndrome

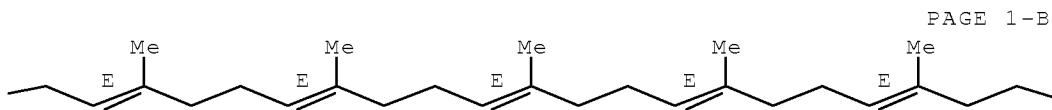
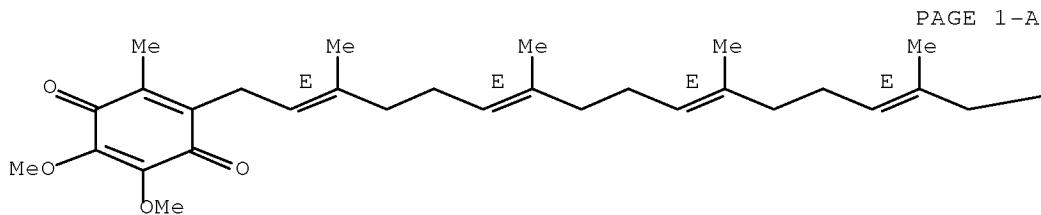
Respiratory system, disease

(compns. with non-glucocorticoid steroid and/or ubiquinone and kits for treatment of respiratory diseases)

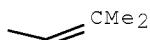
10/597378

IT Drug delivery systems  
(topical; compns. with non-glucocorticoid steroid and/or ubiquinone and kits for treatment of respiratory diseases)  
IT 53-42-9, Etiocholanolone 53-43-0, Dehydroepiandrosterone 58-18-4,  
Methyltestosterone 303-98-0, CoQ 10 481-29-8,  
Epiandrosterone 651-48-9, Dehydroepiandrosterone sulfate 28507-02-0,  
16 $\alpha$ -Bromo-epiandrosterone 80724-82-9,  
16 $\alpha$ -Fluoro-epiandrosterone  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(compns. with non-glucocorticoid steroid and/or ubiquinone and kits for treatment of respiratory diseases)  
IT 303-98-0, CoQ 10  
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(compns. with non-glucocorticoid steroid and/or ubiquinone and kits for treatment of respiratory diseases)  
RN 303-98-0 ZCPLUS  
CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-  
3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-  
tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/597378

ACCESSION NUMBER: 2002:315492 ZCPLUS Full-text  
DOCUMENT NUMBER: 136:330579  
TITLE: Homeopathic preparations containing proteins  
INVENTOR(S): Brewitt, Barbara A.  
PATENT ASSIGNEE(S): USA  
SOURCE: U.S. Pat. Appl. Publ., 10 pp., Cont.-in-part of U. S.  
Ser. No. 870,132.  
CODEN: USXXCO  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 6  
PATENT INFORMATION:

| PATENT NO.             | KIND | DATE     | APPLICATION NO. | DATE            |
|------------------------|------|----------|-----------------|-----------------|
| US 20020049422         | A1   | 20020425 | US 2001-1367    | 20011030 <--    |
| US 5629286             | A    | 19970513 | US 1996-710040  | 19960910 <--    |
| US 6239105             | B1   | 20010529 | US 1999-251820  | 19990217 <--    |
| US 20020071873         | A1   | 20020613 | US 2001-870132  | 20010529 <--    |
| US 20030191061         | A1   | 20031009 | US 2002-304635  | 20021126 <--    |
| US 20060088575         | A1   | 20060427 | US 2005-242988  | 20051004 <--    |
| PRIORITY APPLN. INFO.: |      |          | US 1994-221365  | B2 19940331 <-- |
|                        |      |          | US 1995-488722  | B1 19950608 <-- |
|                        |      |          | US 1996-710040  | A2 19960910 <-- |
|                        |      |          | US 1997-855096  | A2 19970513 <-- |
|                        |      |          | US 1999-251820  | A1 19990217 <-- |
|                        |      |          | US 2000-255958P | P 20001215 <--  |
|                        |      |          | US 2001-870132  | A2 20010529 <-- |
|                        |      |          | US 2000-499230  | A2 20000207 <-- |
|                        |      |          | US 2001-1367    | A2 20011030 <-- |

AB The present invention comprises homeopathic preps. of a purified protein, as well as methods and systems for delivery of such preps. and treatment of disorders and conditions by administering such preps. A homeopathic recombinant growth hormone (HrhGH) was formulated in a cosmetic eye gel formulation. Topical application of HrhGH decreased wrinkles and increased attractiveness of eyes.

IC ICM A61K038-00  
ICS A61K038-43; A61K031-685; A61K035-78

INCL 604500000

CC 63-6 (Pharmaceuticals)  
Section cross-reference(s): 2, 3

IT Drug delivery systems  
(gels, topical; homeopathic preps. containing proteins)

IT Amino acids, biological studies  
Ciliary neurotrophic factor  
Epidermal growth factor receptors  
Hepatocyte growth factor  
Interleukin 1  
Interleukin 2  
Minerals, biological studies  
Neuregulin 1  
Neuregulin 1  
Phosphatidylserines  
Platelet-derived growth factors  
Proteins  
Stem cell factor  
Tumor necrosis factors  
Vitamins

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(homeopathic preps. containing proteins)

10/597378

IT Drug delivery systems  
(topical; homeopathic preps. containing proteins)

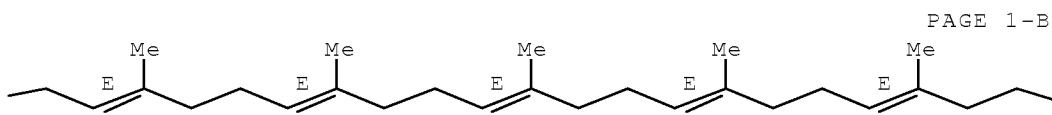
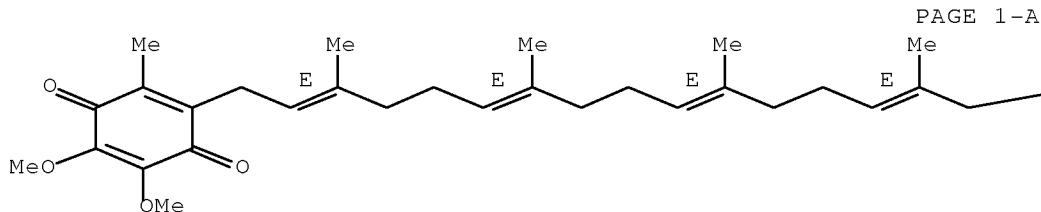
IT 79-14-1, Glycolic acid, biological studies 302-79-4, Retinoic acid  
303-98-0, CoQ10 541-15-1, Carnitine 1406-18-4, Vitamin E  
6217-54-5, DHA 9061-61-4, NGF 12001-79-5, Vitamin K 61811-29-8,  
Apurinic endonuclease 61912-98-9, IGF 67763-96-6, IGF-1 81627-83-0,  
M-CSF 83869-56-1, GM-CSF 106096-92-8, FGF 1 106096-93-9, FGF 2  
110098-88-9, Bombyxin 143011-72-7, G-CSF 148348-15-6, Fibroblast  
growth factor 7 161384-17-4, MT-MMP1 192230-91-4, Stress-activated  
protein kinase kinase-1  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(homeopathic preps. containing proteins)

IT 303-98-0, CoQ10  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(homeopathic preps. containing proteins)

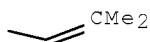
RN 303-98-0 ZCPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-  
3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-  
tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

L88 ANSWER 24 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2002:185691 ZCPLUS Full-text  
DOCUMENT NUMBER: 136:236872  
TITLE: Epiandrosterones or ubiquinones for treatment of  
asthma and reduction of adenosine/adenosine receptor

INVENTOR(S): Nyce, Jonathan W.  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 10 pp., Cont.-in-part of U.S.  
 Ser. No. 488,236.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

| PATENT NO.                                                                                                                                                                                                                                                                                                                                                        | KIND | DATE     | APPLICATION NO. | DATE            |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|-----------------|
| US 20020032160                                                                                                                                                                                                                                                                                                                                                    | A1   | 20020314 | US 2001-841426  | 20010424 <--    |
| US 5660835                                                                                                                                                                                                                                                                                                                                                        | A    | 19970826 | US 1995-393863  | 19950224 <--    |
| EP 1555025                                                                                                                                                                                                                                                                                                                                                        | A2   | 20050720 | EP 2005-4694    | 19960215 <--    |
| EP 1555025                                                                                                                                                                                                                                                                                                                                                        | A3   | 20050803 |                 |                 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE                                                                                                                                                                                                                                                                                             |      |          |                 |                 |
| US 6087351                                                                                                                                                                                                                                                                                                                                                        | A    | 20000711 | US 1997-861962  | 19970522 <--    |
| AU 9911317                                                                                                                                                                                                                                                                                                                                                        | A    | 19990304 | AU 1999-11317   | 19990114 <--    |
| AU 730453                                                                                                                                                                                                                                                                                                                                                         | B2   | 20010308 |                 |                 |
| US 6670349                                                                                                                                                                                                                                                                                                                                                        | B1   | 20031230 | US 2000-488236  | 20000120 <--    |
| US 20020119936                                                                                                                                                                                                                                                                                                                                                    | A1   | 20020829 | US 2001-72010   | 20011025 <--    |
| WO 2002085373                                                                                                                                                                                                                                                                                                                                                     | A1   | 20021031 | WO 2002-US12489 | 20020422 <--    |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW |      |          |                 |                 |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG                                                                                                                                                                |      |          |                 |                 |
| AU 2002254682                                                                                                                                                                                                                                                                                                                                                     | A1   | 20021105 | AU 2002-254682  | 20020422 <--    |
| JP 2005306880                                                                                                                                                                                                                                                                                                                                                     | A    | 20051104 | JP 2005-162494  | 20050602 <--    |
| US 20060111306                                                                                                                                                                                                                                                                                                                                                    | A1   | 20060525 | US 2005-275327  | 20051222 <--    |
| US 20090053143                                                                                                                                                                                                                                                                                                                                                    | A1   | 20090226 | US 2008-196223  | 20080821 <--    |
| US 20090054385                                                                                                                                                                                                                                                                                                                                                    | A1   | 20090226 | US 2008-196233  | 20080821 <--    |
| PRIORITY APPLN. INFO.:                                                                                                                                                                                                                                                                                                                                            |      |          | US 1995-393863  | A3 19950224 <-- |
|                                                                                                                                                                                                                                                                                                                                                                   |      |          | US 1997-861962  | A1 19970522 <-- |
|                                                                                                                                                                                                                                                                                                                                                                   |      |          | US 2000-488236  | A2 20000120 <-- |
|                                                                                                                                                                                                                                                                                                                                                                   |      |          | AU 1996-48677   | A3 19960215 <-- |
|                                                                                                                                                                                                                                                                                                                                                                   |      |          | EP 1996-904622  | A3 19960215 <-- |
|                                                                                                                                                                                                                                                                                                                                                                   |      |          | JP 1996-525728  | A3 19960215 <-- |
|                                                                                                                                                                                                                                                                                                                                                                   |      |          | US 2001-841426  | A3 20010424 <-- |
|                                                                                                                                                                                                                                                                                                                                                                   |      |          | US 2001-72010   | B1 20011025 <-- |
|                                                                                                                                                                                                                                                                                                                                                                   |      |          | WO 2002-US12489 | W 20020422 <--  |

## ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

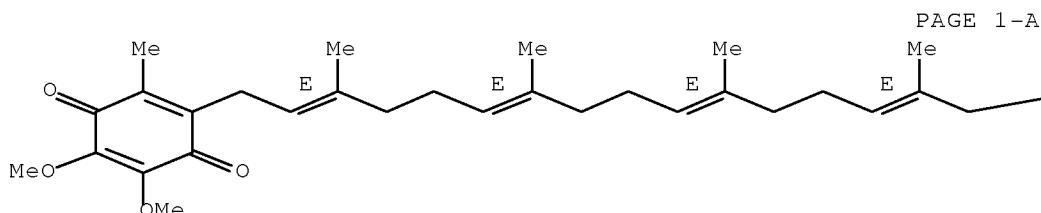
OTHER SOURCE(S): MARPAT 136:236872

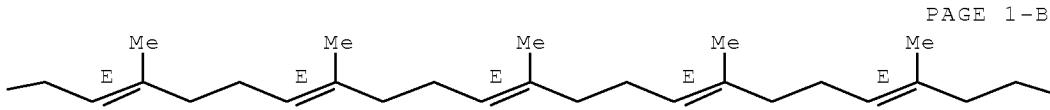
AB A composition and various formulations comprise preventative or therapeutic amts. of an epiandrosterone, analog thereof or salt thereof, and/or a ubiquinone or salt thereof, and a pharmaceutically or veterinarily acceptable carrier or diluent. The composition and formulations are useful for treating bronchoconstriction, respiratory tract inflammation and allergies, asthma, and cancer. A method of treating diseases associated with low adenosine levels or adenosine depletion comprises administering folic acid or a pharmaceutically acceptable salt hereof in a preventative or therapeutic amount, or an amount effective to treat adenosine depletion. For example, rats administered DHEA or methyltestosterone daily for two weeks showed multi-organ depletion of adenosine. Depletion was dramatic in brain (60% depletion for DHEA, 34% for

high dose methyltestosterone) and heart (37% depletion for DHEA, 22% depletion for high dose methyltestosterone). Coadministration of folinic acid completely abrogated steroid-mediated adenosine depletion. Folinic acid administered alone induce increase in adenosine levels for all organs studied. Also, both DHEA and ubiquinones inhibited NADPH levels in vitro by inhibiting the activity of glucose-6-phosphate dehydrogenase, an enzyme involved in the conversion of NADP to NADPH.

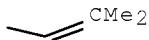
IC ICM A61K031-704  
 ICS A61K031-66; A61K031-56  
 INCL 514026000  
 CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 1, 2  
 ST epiandrosterone ubiquinone folinic acid oral topical parenteral;  
 adenosine receptor epiandrosterone ubiquinone antiasthmatic  
 IT Lung, neoplasm  
 (inhibitors; compns. containing epiandrosterones or ubiquinones for treatment of asthma and reduction of adenosine/adenosine receptor levels)  
 IT Analgesics  
 Anti-inflammatory agents  
 Antitumor agents  
 (lung; compns. containing epiandrosterones or ubiquinones for treatment of asthma and reduction of adenosine/adenosine receptor levels)  
 IT Drug delivery systems  
 (topical; compns. containing epiandrosterones or ubiquinones for treatment of asthma and reduction of adenosine/adenosine receptor levels)  
 IT 53-42-9, Etiocholanolone 53-43-0, Dehydroepiandrosterone 303-95-7,  
 Ubiquinone 7 303-97-9, Ubiquinone 9 303-98-0, Ubiquinone 10  
 481-29-8D, Epiandrosterone, analogs and derivs. 606-06-4, Ubiquinone 2  
 651-48-9, Dehydroepiandrosterone sulfate 727-81-1, Ubiquinone 1  
 1065-31-2, Ubiquinone 6 1173-76-8, Ubiquinone 3 2394-68-5, Ubiquinone  
 8 4370-61-0, Ubiquinone 5 4370-62-1, Ubiquinone 4 28507-02-0,  
 16 $\alpha$ -Bromoepiandrosterone 80724-81-8 80724-82-9,  
 16 $\alpha$ -Fluoroepiandrosterone  
 RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study);  
 USES (Uses)  
 (compns. containing epiandrosterones or ubiquinones for treatment of asthma and reduction of adenosine/adenosine receptor levels)  
 IT 303-98-0, Ubiquinone 10  
 RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study);  
 USES (Uses)  
 (compns. containing epiandrosterones or ubiquinones for treatment of asthma and reduction of adenosine/adenosine receptor levels)  
 RN 303-98-0 ZCAPLUS  
 CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-  
 3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-  
 tetraccontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.





PAGE 1-C



L88 ANSWER 25 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2002:944466 ZCPLUS Full-text  
 DOCUMENT NUMBER: 138:16617  
 TITLE: Tocopherol derivatives for stabilizing nano-sized emulsion particles containing lecithin and their topical application to the skin  
 INVENTOR(S): Yoo, Byung Hee; Kim, Joong Soo; Kang, Young Byung; Kim, Joong Kil; Han, Hoon Sang  
 PATENT ASSIGNEE(S): Pacific Corporation, S. Korea  
 SOURCE: Eur. Pat. Appl., 21 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.                                                                                                | KIND | DATE     | APPLICATION NO. | DATE         |
|-----------------------------------------------------------------------------------------------------------|------|----------|-----------------|--------------|
| EP 1264595                                                                                                | A1   | 20021211 | EP 2002-8705    | 20020418 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR |      |          |                 |              |
| KR 2002092622                                                                                             | A    | 20021212 | KR 2001-31360   | 20010605 <-- |
| US 20030078238                                                                                            | A1   | 20030424 | US 2002-120389  | 20020412 <-- |
| US 6780430                                                                                                | B2   | 20040824 |                 |              |
| JP 2003026604                                                                                             | A    | 20030129 | JP 2002-121331  | 20020423 <-- |
| JP 4237446                                                                                                | B2   | 20090311 |                 |              |

PRIORITY APPLN. INFO.: KR 2001-31360 A 20010605 <--

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 138:16617

AB A stabilization method of nano-sized emulsion by using lecithin and tocopheryl derivs. and an topical application for skin containing the stabilized nano-sized emulsions are disclosed. 3-Aminopropyl- $\alpha$ -tocopherol phosphate (I) was prepared by the reaction of POCl<sub>3</sub> with  $\alpha$ -tocopherol in THF followed by the addition of 3-amino-1-propanol in the presence of Et<sub>3</sub>N to the resulting tocopherol dichlorophosphate. HCl treatment gave I. Nano-sized emulsion particles were prepared with varying amts. of lecithin and the tocopheryl derivative

IC ICM A61K009-107  
 CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 30  
 ST tocopherol phosphate stabilization emulsion lecithin prepn; topical skin  
 lecithin tocopherol phosphate prepn  
 IT Drug delivery systems  
     (emulsions; tocopherol derivs. for stabilizing nano-sized emulsion  
     particles containing lecithin for topical application to skin)  
 IT Edema  
     (inhibitors; tocopherol derivs. for stabilizing nano-sized emulsion  
     particles containing lecithin for topical application to skin)  
 IT Allergy inhibitors  
     Analgesics  
     Anti-inflammatory agents  
     Antiarrhythmics  
     Antibiotics  
     Anticonvulsants  
     Antihypertensives  
     Antioxidants  
     Antipyretics  
         Antitumor agents  
     Antitussives  
     Antiulcer agents  
     Cardiotonics  
     Expectorants  
     Hemostatics  
     Muscle relaxants  
     Skin  
     Stability  
     Vasodilators  
         (tocopherol derivs. for stabilizing nano-sized emulsion particles  
         containing lecithin for topical application to skin)  
 IT Enzymes, biological studies  
     Hormones, animal, biological studies  
     Lecithins  
     Peptides, biological studies  
         RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
         (tocopherol derivs. for stabilizing nano-sized emulsion particles  
         containing lecithin for topical application to skin)  
 IT Drug delivery systems  
     (topical; tocopherol derivs. for stabilizing nano-sized  
     emulsion particles containing lecithin for topical application to  
     skin)  
 IT 59-02-9, α-Tocopherol 156-87-6, 3-Amino-1-propanol  
     RL: RCT (Reactant); RACT (Reactant or reagent)  
         (tocopherol derivs. for stabilizing nano-sized emulsion particles  
         containing lecithin for topical application to skin)  
 IT 61893-39-8P 429682-32-6P  
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
     (Reactant or reagent)  
         (tocopherol derivs. for stabilizing nano-sized emulsion particles  
         containing lecithin for topical application to skin)  
 IT 429682-33-7P  
     RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological  
     study); PREP (Preparation); USES (Uses)  
         (tocopherol derivs. for stabilizing nano-sized emulsion particles  
         containing lecithin for topical application to skin)  
 IT 68-26-8, Retinol 303-98-0, Coenzyme Q10 501-36-0,  
     Resveratrol  
         RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

10/597378

(tocopherol derivs. for stabilizing nano-sized emulsion particles containing lecithin for topical application to skin)

IT 303-98-0, Coenzyme Q10

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

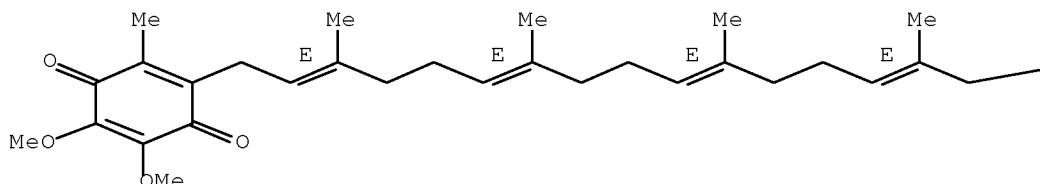
(tocopherol derivs. for stabilizing nano-sized emulsion particles containing lecithin for topical application to skin)

RN 303-98-0 ZCAPLUS

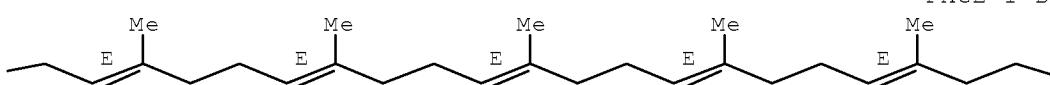
CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.

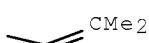
PAGE 1-A



PAGE 1-B



PAGE 1-C



OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 26 OF 41 ZCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2002:961423 ZCAPLUS [Full-text](#)

DOCUMENT NUMBER: 138:16475

TITLE: Use of ascorbic acid and bioquinones for the production of angiogenetically active topical preparations

INVENTOR(S): Sauermann, Kirsten; Schimpf, Ralph; Filbry, Alexander; Wepf, Roger; Schreiner, Volker; Jaspers, Soeren; Schoenrock, Uwe; Ennen, Joachim; Sauermann, Gerhard

PATENT ASSIGNEE(S): Beiersdorf AG, Germany

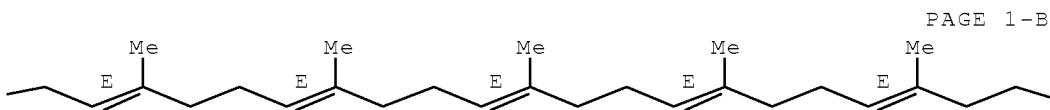
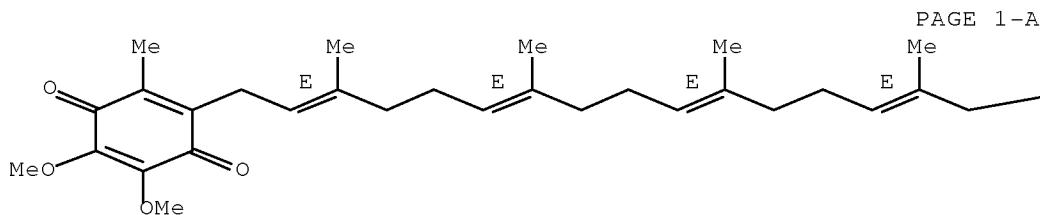
SOURCE: Ger. Offen., 8 pp.

CODEN: GWXXBX

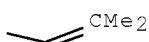
DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.                                                                                                                                                                                                                                                                                                                                                                                                            | KIND | DATE     | APPLICATION NO.  | DATE         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|------------------|--------------|
| DE 10128818                                                                                                                                                                                                                                                                                                                                                                                                           | A1   | 20021219 | DE 2001-10128818 | 20010615 <-- |
| PRIORITY APPLN. INFO.:                                                                                                                                                                                                                                                                                                                                                                                                |      |          | DE 2001-10128818 | 20010615 <-- |
| AB The invention concerns angiogenetically active cosmetic and dermatol. prepsns. that contain ascorbic acid and bioquinones. Thus a W/O lotion contained (weight/weight%): paraffin oil 20.00; petrolatum 4.00; glucose sesquiisostearate 2.00; aluminum stearate 0.40, ascorbic acid 1.50; Coenzyme Q10 0.10; Vitamin E acetate 2.00; Vitamin C palmitate 0.20; glycerin 5.00; water, preservative, perfume to 100. |      |          |                  |              |
| IC ICM A61K007-00                                                                                                                                                                                                                                                                                                                                                                                                     |      |          |                  |              |
| ICS C07D307-33                                                                                                                                                                                                                                                                                                                                                                                                        |      |          |                  |              |
| CC 62-4 (Essential Oils and Cosmetics)                                                                                                                                                                                                                                                                                                                                                                                |      |          |                  |              |
| Section cross-reference(s): 63                                                                                                                                                                                                                                                                                                                                                                                        |      |          |                  |              |
| ST ascorbate bioquinone Coenzyme Q10 cream skin aging angiogenetic activity                                                                                                                                                                                                                                                                                                                                           |      |          |                  |              |
| IT Skin, disease<br>(aging; use of ascorbic acid and bioquinones for production of angiogenetically active topical prepsns.)                                                                                                                                                                                                                                                                                          |      |          |                  |              |
| IT Quinones<br>RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)<br>(bioquinones; use of ascorbic acid and bioquinones for production of angiogenetically active topical prepsns.)                                                                                                                                                                                                  |      |          |                  |              |
| IT Cosmetics<br>(creams; use of ascorbic acid and bioquinones for production of angiogenetically active topical prepsns.)                                                                                                                                                                                                                                                                                             |      |          |                  |              |
| IT Cosmetics<br>(gels; use of ascorbic acid and bioquinones for production of angiogenetically active topical prepsns.)                                                                                                                                                                                                                                                                                               |      |          |                  |              |
| IT Cosmetics<br>(lotions; use of ascorbic acid and bioquinones for production of angiogenetically active topical prepsns.)                                                                                                                                                                                                                                                                                            |      |          |                  |              |
| IT Drug delivery systems<br>(topical; use of ascorbic acid and bioquinones for production of angiogenetically active topical prepsns.)                                                                                                                                                                                                                                                                                |      |          |                  |              |
| IT 50-81-7, L-Ascorbic acid, biological studies 303-98-0,<br>Coenzyme Q10<br>RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)<br>(use of ascorbic acid and bioquinones for production of angiogenetically active topical prepsns.)                                                                                                                                                 |      |          |                  |              |
| IT 303-98-0, Coenzyme Q10<br>RL: COS (Cosmetic use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)<br>(use of ascorbic acid and bioquinones for production of angiogenetically active topical prepsns.)                                                                                                                                                                                                 |      |          |                  |              |
| RN 303-98-0 ZCAPLUS                                                                                                                                                                                                                                                                                                                                                                                                   |      |          |                  |              |
| CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)                                                                                                                                                                                                             |      |          |                  |              |

Double bond geometry as shown.



PAGE 1-C



REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 27 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2001:396644 ZCPLUS Full-text  
 DOCUMENT NUMBER: 135:24671  
 TITLE: Solid carriers for improved delivery of active ingredients in pharmaceutical compositions  
 INVENTOR(S): Patel, Manesh V.; Chen, Feng-jing  
 PATENT ASSIGNEE(S): Lipocene, Inc., USA  
 SOURCE: PCT Int. Appl., 107 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 13  
 PATENT INFORMATION:

| PATENT NO.                                                                                                                                                                                                                                                                                                                                | KIND | DATE     | APPLICATION NO. | DATE         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|--------------|
| WO 2001037808                                                                                                                                                                                                                                                                                                                             | A1   | 20010531 | WO 2000-US32255 | 20001122 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW |      |          |                 |              |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG                                                                                                                                                |      |          |                 |              |
| US 6248363                                                                                                                                                                                                                                                                                                                                | B1   | 20010619 | US 1999-447690  | 19991123 <-- |

|                                                                                                              |    |          |                 |                |
|--------------------------------------------------------------------------------------------------------------|----|----------|-----------------|----------------|
| CA 2391923                                                                                                   | A1 | 20010531 | CA 2000-2391923 | 20001122 <--   |
| EP 1233756                                                                                                   | A1 | 20020828 | EP 2000-980761  | 20001122 <--   |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO, MK, CY, AL, TR |    |          |                 |                |
| JP 2003517470                                                                                                | T  | 20030527 | JP 2001-539423  | 20001122 <--   |
| PRIORITY APPLN. INFO.:                                                                                       |    |          | US 1999-447690  | A 19991123 <-- |
|                                                                                                              |    |          | WO 2000-US32255 | W 20001122 <-- |

## ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB The present invention provides solid pharmaceutical compns. for improved delivery of a wide variety of pharmaceutical active ingredients contained therein or sep. administered. In one embodiment, the solid pharmaceutical composition includes a solid carrier, the solid carrier including a substrate and an encapsulation coat on the substrate. The encapsulation coat can include different combinations of pharmaceutical active ingredients, hydrophilic surfactant, lipophilic surfactants and triglycerides. In another embodiment, the solid pharmaceutical composition includes a solid carrier, the solid carrier being formed of different combinations of pharmaceutical active ingredients, hydrophilic surfactants, lipophilic surfactants and triglycerides. The compns. of the present invention can be used for improved delivery of hydrophilic or hydrophobic pharmaceutical active ingredients, such as drugs, nutritionals, cosmeceuticals and diagnostic agents. A composition contained glyburide 1, PEG 40 stearate 33, glycerol monolaurate 17, and nonpareil seed 80 g.

IC ICM A61K009-14  
ICS A61K009-16; A61K009-20; A61K009-46; A61K009-48; A61K009-50;  
A61K009-54

CC 63-6 (Pharmaceuticals)

IT Analgesics  
Anti-inflammatory agents  
Anticoagulants  
Anticonvulsants  
Antidepressants  
Antidiabetic agents  
Antihistamines  
Antihypertensives  
Antimalarials  
Antipsychotics  
Antitumor agents  
Anxiolytics  
Fungicides  
Hypnotics and Sedatives  
Immunosuppressants  
Muscarinic antagonists  
Muscle relaxants  
Plasticizers  
Protozoacides  
Sweetening agents  
Tranquilizers  
Vaccines  
(solid carriers for improved delivery of active ingredients in pharmaceutical compns.)

IT Drug delivery systems  
(topical; solid carriers for improved delivery of active ingredients in pharmaceutical compns.)

IT Fusion proteins (chimeric proteins)  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(tumor necrosis factor receptor:Fc region; solid carriers for improved delivery of active ingredients in pharmaceutical compns.)

IT 50-14-6, Ergocalciferol 50-24-8, Prednisolone 50-28-2, Estradiol, biological studies 50-34-0, Propantheline bromide 50-56-6, Oxytocin,

biological studies 51-15-0, Pralidoxime chloride 51-43-4, Epinephrine 51-48-9, L-Thyroxine, biological studies 51-55-8, Atropine, biological studies 51-60-5, Neostigmine methyl sulfate 52-01-7, Spironolactone 52-24-4, Thiotepea 53-43-0, Dehydroepiandrosterone 55-98-1, Busulphan 57-13-6, Urea, biological studies 57-22-7, Vincristine 57-64-7, Physostigmine salicylate 57-83-0, Progesterone, biological studies 57-94-3, Tubocurarine chloride 59-05-2, Methotrexate 60-31-1, Acetylcholine chloride 62-31-7, Dopamine hydrochloride 63-91-2, L-Phenylalanine, biological studies 65-28-1, Phentolamine mesylate 66-76-2, Dicoumarol 67-20-9, Nitrofurantoin 67-45-8, Furazolidone 67-96-9, Dihydrotachysterol 67-97-0, Cholecalciferol 68-19-9, Vitamin b12 69-65-8, D-Mannitol 70-51-9, Deferoxamine 71-27-2, Suxamethonium chloride 74-89-5, Methanamine, biological studies 76-57-3, Codeine 76-90-4, Mepenzolate bromide 76-99-3, Methadone 77-19-0, Dicyclomine 87-33-2, Isosorbide dinitrate 89-57-6, Mesalamine 90-82-4, Pseudoephedrine 101-26-8, Pyridostigmine bromide 104-31-4, Benzonatate 113-15-5, Ergotamine 113-92-8, Chlorpheniramine 114-07-8, Erythromycin 114-80-7, Neostigmine bromide 125-84-8, Aminoglutethimide 126-07-8, Griseofulvin 127-40-2, Lutein 129-06-6, Warfarin sodium 131-49-7, Diatrizoate meglumine 140-64-7, Pentamidine isethionate 147-94-4, Cytarabine 154-21-2, Lincomycin 155-97-5, Pyridostigmine 298-46-4, Carbamazepine 298-57-7, Cinnarizine 298-81-7, Methoxsalen 299-42-3, Ephedrine 300-62-9, Amphetamine 302-79-4, Tretinoil 303-49-1, Clomipramine 303-53-7, Cyclobenzaprine 303-98-0, Coenzyme Q10 321-64-2, Tacrine 359-83-1, Pentazocine 378-44-9, Betamethasone 404-86-4, Capsaicin 437-38-7, Fentanyl 443-48-1, Metronidazole 502-65-8, Lycopene 511-12-6, Dihydroergotamine 520-85-4, Medroxyprogesteron 577-11-7, Sodium docusate 595-33-5 596-51-0, Glycopyrrolate 616-91-1, Acetylcysteine 665-66-7, Amantadine hydrochloride 737-31-5, Diatrizoate sodium 865-21-4, Vinblastine 911-45-5, Clomiphene 1115-70-4, Metformin hydrochloride 1134-47-0, Baclofen 1264-72-8, Colistin sulfate 1319-82-0, Aminocaproic acid 1397-89-3, Amphotericin b 1403-66-3, Gentamycin 1404-90-6, Vancomycin 1405-20-5, Polymyxin B sulfate 1405-37-4, Capreomycin sulfate 1405-87-4, Bacitracin 1406-16-2, Vitamin D 1406-18-4, Vitamin E 1492-18-8, Leucovorin calcium 1501-84-4, Rimantadine hydrochloride 1684-40-8, Tacrine hydrochloride 1695-77-8, Spectinomycin 1951-25-3, Amiodarone 1972-08-3, Tetrahydrocannabinol 2016-88-8, Amiloride hydrochloride 3056-17-5, Stavudine 3485-62-9, Clidinium bromide 3778-73-2, Isofosfamide 3930-20-9, Sotalol 4291-63-8, Cladribine 4419-39-0, Beclomethasone 4759-48-2, Isotretinoin 5104-49-4, Flurbiprofen 5534-95-2, Pentagastrin 6493-05-6, Pentoxyfylline 7261-97-4, Dantralene 7414-83-7, Disodium etidronate 7481-89-2, Zalcitabine 7648-98-8, Ambenonium 7689-03-4, Camptothecin 8068-28-8, Colistimethate sodium 9001-27-8, Factor VIII 9001-28-9, Factor IX 9002-01-1, Streptokinase 9002-60-2, Corticotropin, biological studies 9002-61-3, Chorionic gonadotropin 9004-17-5, NPH insulin 9004-99-3, Polyethylene glycol stearate 9005-63-4D, Polyoxyethylene sorbitan, fatty acid esters 9007-92-5, Glucagon, biological studies 9015-68-3, Asparaginase 9034-40-6, Gonadotropin-releasing hormone 9039-53-6, Urokinase 9041-08-1, Dalteparin sodium 9041-93-4, Bleomycin sulfate 9087-70-1, Aprotinin 10238-21-8, Glibenclamide 10540-29-1, Tamoxifen 10596-23-3, Clodronic acid 11000-17-2, Vasopressin 11061-68-0, Insulin (human) 11103-57-4, Vitamin A 12001-79-5, Vitamin K 12584-58-6, Porcine insulin 13265-10-6, Methscopolamine 15307-86-5, Diclofenac 15500-66-0, Pancuronium bromide 15574-96-6, Pizotifen 15663-27-1, Cisplatin 15686-51-8, Clemastine 15686-71-2, Cephalexin 15687-27-1, Ibuprofen 15826-37-6, Cromolyn sodium 16679-58-6, Desmopressin 16960-16-0, Cosyntropin 17230-88-5, Danazol 18323-44-9, Clindamycin 18559-94-9, Albuterol 18883-66-4, Streptozocin 19356-17-3, Calcifediol

20537-88-6, Amifostine 20594-83-6, Nalbuphine 20830-75-5, Digoxin 21215-62-3, Human calcitonin 21256-18-8, Oxaprozin 21679-14-1, Fludarabine 21829-25-4, Nifedipine 22254-24-6, Ipratropium bromide 22916-47-8, Miconazole 23031-32-5, Terbutaline sulfate 23214-92-8, Doxorubicin 23288-49-5, Probucol 24356-60-3, Cephapirin sodium 25126-32-3, Sincalide 25322-68-3D, PEG, esters 25523-97-1, Dexchlorpheniramine 25618-55-7D, Polyglycerol, fatty acid esters 25812-30-0, Gemfibrozil 26839-75-8, Timolol 27164-46-1, Cefazolin sodium 27203-92-5, Tramadol 27215-38-9, Glycerol monolaurate 29094-61-9, Glipizide 29122-68-7, Atenolol 29767-20-2, Teniposide 30516-87-1, Zidovudine 32222-06-3, Calcitriol 33069-62-4, Paclitaxel 33419-42-0, Etoposide 33515-09-2, Gonadorelin 33564-30-6, Cefoxitin sodium 34787-01-4, Ticarcillin 34911-55-2, Bupropion 35607-66-0, Cefoxitin 36791-04-5, Ribavirin 38304-91-5, Minoxidil 41340-25-4, Etodolac 41575-94-4, Carboplatin 42057-22-7, Mezlocillin sodium 42540-40-9, Cefamandole nafate 42924-53-8, Nabumetone 43200-80-2, Zopiclone 47931-85-1, Salmon calcitonin 49562-28-9, Fenofibrate 49697-38-3, Rimexolone 50700-72-6, Vecuronium bromide 51110-01-1, Somatostatin 51322-75-9, Tizanidine 51333-22-3, Budesonide 51384-51-1, Metoprolol 51481-61-9, Cimetidine 53123-88-9, Sirolimus 53179-11-6, Loperamide 53230-10-7, Mefloquine 53910-25-1, Pentostatin 54063-53-5, Propafenone 54910-89-3, Fluoxetine 54965-21-8, Albendazole 55142-85-3, Ticlopidine 56180-94-0, Acarbose 57248-88-1, Pamidronate disodium 59277-89-3, Acyclovir 59467-70-8, Midazolam 59703-84-3, Piperacillin sodium 59865-13-3, Cyclosporine 60142-96-3, Neurontin 61270-78-8, Cefonicid sodium 61379-65-5, Rifapentine 61869-08-7, Paroxetine 62013-04-1, Dirithromycin 62893-19-0, Cefoperazone 63585-09-1, Foscarnet sodium 63612-50-0, Nilutamide 63675-72-9, Nisoldipine 64228-81-5, Atracurium besylate 64544-07-6, Cefuroxime axetil 65271-80-9, Mitoxantrone 65277-42-1, Ketoconazole 66376-36-1, Alendronate 68099-86-5, Bepridil hydrochloride 68401-81-0, Ceftizoxime  
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(solid carriers for improved delivery of active ingredients in pharmaceutical compns.)

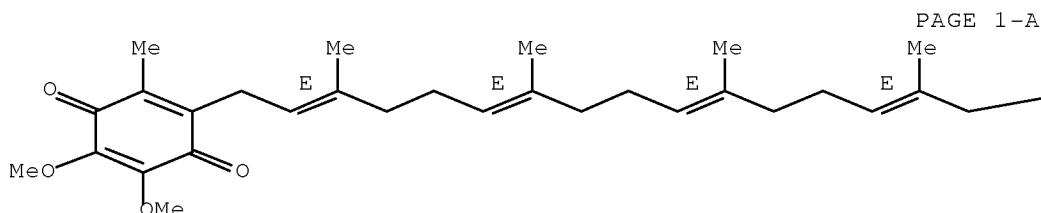
IT 303-98-0, Coenzyme Q10

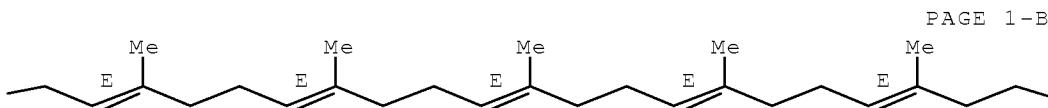
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(solid carriers for improved delivery of active ingredients in pharmaceutical compns.)

RN 303-98-0 ZCPLUS

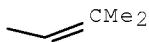
CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.





PAGE 1-C



OS.CITING REF COUNT: 19 THERE ARE 19 CAPLUS RECORDS THAT CITE THIS  
RECORD (19 CITINGS)  
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 28 OF 41 ZCAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2001:300492 ZCAPLUS Full-text  
DOCUMENT NUMBER: 134:316129  
TITLE: Microcapsules for stabilizing cosmetic, pharmaceutical  
or food products  
INVENTOR(S): Parente Duena, Antonio; Bonilla Munoz, Angel; Garces  
Garces, Josep  
PATENT ASSIGNEE(S): Lipotec, S.A., Spain  
SOURCE: PCT Int. Appl., 18 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: Spanish  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

| PATENT NO.                                                                                                                                                                                                                                                                                                                                                   | KIND | DATE     | APPLICATION NO. | DATE         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|--------------|
| WO 2001028530                                                                                                                                                                                                                                                                                                                                                | A1   | 20010426 | WO 2000-ES403   | 20001019 <-- |
| W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,<br>CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR,<br>HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,<br>LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,<br>SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,<br>YU, ZA, ZW |      |          |                 |              |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,<br>DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,<br>CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG                                                                                                                                                                 |      |          |                 |              |
| ES 2162746                                                                                                                                                                                                                                                                                                                                                   | A1   | 20020101 | ES 1999-2323    | 19991021 <-- |
| ES 2162746                                                                                                                                                                                                                                                                                                                                                   | B1   | 20030216 |                 |              |
| CA 2388166                                                                                                                                                                                                                                                                                                                                                   | A1   | 20010426 | CA 2000-2388166 | 20001019 <-- |
| AU 2001010305                                                                                                                                                                                                                                                                                                                                                | A    | 20010430 | AU 2001-10305   | 20001019 <-- |
| BR 2000014836                                                                                                                                                                                                                                                                                                                                                | A    | 20020611 | BR 2000-14836   | 20001019 <-- |
| EP 1222918                                                                                                                                                                                                                                                                                                                                                   | A1   | 20020717 | EP 2000-971451  | 20001019 <-- |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO, MK, CY, AL                                                                                                                                                                                                                                                     |      |          |                 |              |
| JP 2003535032                                                                                                                                                                                                                                                                                                                                                | T    | 20031125 | JP 2001-531360  | 20001019 <-- |
| MX 2002003933                                                                                                                                                                                                                                                                                                                                                | A    | 20030922 | MX 2002-3933    | 20020419 <-- |

|                        |    |          |                |                 |
|------------------------|----|----------|----------------|-----------------|
| US 20060051408         | A1 | 20060309 | US 2005-265467 | 20051102 <--    |
| PRIORITY APPLN. INFO.: |    |          | ES 1999-2323   | A 19991021 <--  |
|                        |    |          | WO 2000-ES403  | W 20001019 <--  |
|                        |    |          | US 2002-111333 | A3 20020418 <-- |

## ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

AB Microcapsules for stabilizing cosmetic, pharmaceutical or food products, having a size which is smaller than 500 µm, said microcapsules being comprised of a core of adsorbent material which can be a water insol. natural or modified polysaccharide or an inorg. adsorbent material, wherein are included the active ingredients and is coated with polymer material (natural polymer or natural modified polymer or synthetic polymer which is appropriate to be used in cosmetic, pharmaceutical or food industries, and is capable of forming films). The microcapsules are incorporated into cosmetic products such as gels, creams, lotions, emulsions, bath gels, shampoos and the like; the microcapsules can also be incorporated into pharmaceutical and veterinary products through topical, oral or parenteral means; the microcapsules can also be incorporated into products for human or animal food and into dietetic products.

IC ICM A61K009-50  
ICS A61K007-00; A23P001-04

CC 63-6 (Pharmaceuticals)  
Section cross-reference(s): 2, 8, 15, 17, 62

IT Anti-inflammatory agents  
Antibacterial agents  
Antiglaucoma agents  
Antitumor agents  
Antiviral agents  
Anxiolytics  
Arnica  
Calendula  
Cardiovascular agents  
Cosmetics  
Drugs  
Dyes  
Fluorescent substances  
Food  
Fungicides  
Ginseng (Panax)  
Immunomodulators  
Microcapsules  
Narcotics  
Nervous system stimulants  
Parasiticides  
Particle size distribution  
Psychotropics  
Saccharomyces cerevisiae  
Shampoos  
Stabilizing agents  
Vasodilators  
(microcapsules for stabilizing cosmetic and pharmaceutical and food products)

IT Drug delivery systems  
(topical; microcapsules for stabilizing cosmetic and pharmaceutical and food products)

IT 52-90-4, Cysteine, biological studies 58-08-2, Caffeine, biological studies 58-95-7, Vitamin e acetate 79-81-2, Vitamin a palmitate 303-98-0, Ubidecarenone 1406-18-4D, Vitamin e, derivs.  
1668-00-4, Arsenazo iii 7439-89-6D, Iron, salts, biological studies 7440-66-6D, Zinc, salts, biological studies 7631-86-9, Silica, biological studies 7782-49-2D, Selenium, salts, biological studies

10/597378

9001-05-2, Catalase 9004-34-6, Cellulose, biological studies  
9004-38-0, Cellulose acetophthalate 9004-57-3, Ethylcellulose  
9004-61-9, Hyaluronic acid 9004-65-3, Hydroxypropylmethylcellulose  
9005-25-8, Starch, biological studies 9005-79-2, Glycogen, biological  
studies 9012-36-6, Agarose 9050-31-1 14807-96-6, Talc, biological  
studies 24938-16-7, Eudragit e 26589-39-9, Eudragit S 33434-24-1,  
Eudragit RL 34346-01-5, Glycolic acid-lactic acid copolymer  
51822-44-7, Eudragit L  
RL: BUU (Biological use, unclassified); FFD (Food or feed use);  
PEP (Physical, engineering or chemical process); THU (Therapeutic  
use); BIOL (Biological study); PROC (Process); USES (Uses)  
(microcapsules for stabilizing cosmetic and pharmaceutical and food  
products)

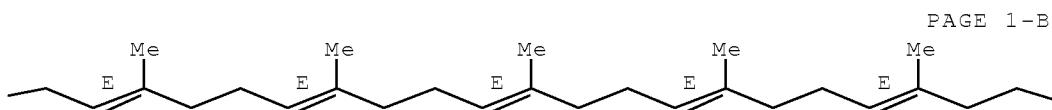
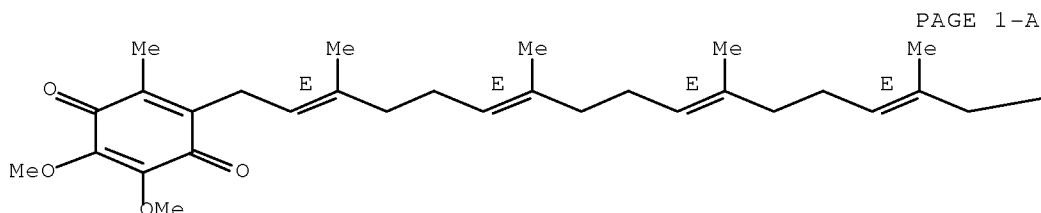
IT 303-98-0, Ubidecarenone

RL: BUU (Biological use, unclassified); FFD (Food or feed use);  
PEP (Physical, engineering or chemical process); THU (Therapeutic  
use); BIOL (Biological study); PROC (Process); USES (Uses)  
(microcapsules for stabilizing cosmetic and pharmaceutical and food  
products)

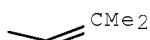
RN 303-98-0 ZCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-  
3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-  
tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



PAGE 1-C



OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(5 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 29 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2000:645846 ZCPLUS Full-text  
 DOCUMENT NUMBER: 133:242652  
 TITLE: Pharmaceutical, dietetic and cosmetic compositions  
       based on tioctic acid and cysteine  
 INVENTOR(S): Dall'aglio, Roberto; Borgonovo, Margherita; Introini,  
       Carlo; Melegari, Pierangelo  
 PATENT ASSIGNEE(S): Uni-Ci S.R.L., Italy  
 SOURCE: PCT Int. Appl., 48 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

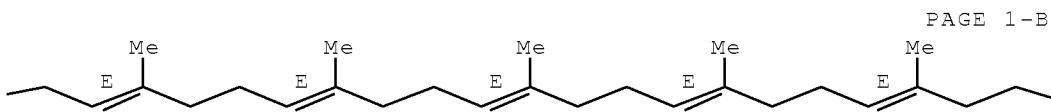
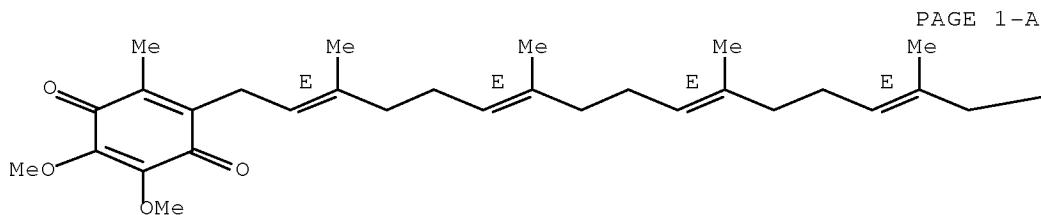
| PATENT NO.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | KIND | DATE     | APPLICATION NO. | DATE           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----------------|----------------|
| WO 2000053176                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | A1   | 20000914 | WO 2000-EP1637  | 20000228 <--   |
| W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,<br>CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL,<br>IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,<br>MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI,<br>SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW<br>RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,<br>DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,<br>CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG |      |          |                 |                |
| IT 1312377                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | B1   | 20020415 | IT 1999-MI460   | 19990305 <--   |
| EP 1156802                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | A1   | 20011128 | EP 2000-907644  | 20000228 <--   |
| EP 1156802                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | B1   | 20051207 |                 |                |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO, CY                                                                                                                                                                                                                                                                                                                                                                                                                                      |      |          |                 |                |
| AT 311874                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | T    | 20051215 | AT 2000-907644  | 20000228 <--   |
| ES 2254145                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | T3   | 20060616 | ES 2000-907644  | 20000228 <--   |
| EP 1072310                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | A3   | 20030108 | EP 2000-113660  | 20000628 <--   |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO, MK, CY, AL                                                                                                                                                                                                                                                                                                                                                                                                                              |      |          |                 |                |
| PRIORITY APPLN. INFO.:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |      |          | IT 1999-MI460   | A 19990305 <-- |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |      |          | WO 2000-EP1637  | W 20000228 <-- |

AB Novel pharmaceutic, dietetic and cosmetic compns., based on tioctic acid and cysteine and/or a pharmaceutically, dietetically or cosmetically acceptable derivative thereof, useful for the prevention and treatment of conditions caused by oxidative stresses and alterations of both aerobic and anaerobic energetic metabolism by activation of mitochondrial energetic enzyme systems (glycolysis and lipolysis) are described. Capsules were filled with N-acetylcysteine (I) 200, magnesium hydroxide 150, and tioctic acid (II) 200 mg. Capsules were orally administered to athletes for 60 days at 10 mg/kg/day of I and II. There was a decrease of 4% in body weight and 7% in body fat and an improvement of 3% proteic mass of muscles.

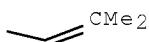
IC ICM A61K031-385  
 ICS A61K031-385; A61K031-195  
 CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 1, 17, 62  
 IT Dermatitis  
      (atopical; pharmaceutical, dietetic and cosmetic compns.  
      based on tioctic acid and cysteine)  
 IT AIDS (disease)  
 Aging, animal  
 Alopecia  
 Alzheimer's disease

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | Antiasthmatics<br>Antidiabetic agents<br>Antiobesity agents<br>Cataract<br>Cosmetics<br>Down's syndrome<br>Erythema<br>Heart, disease<br>Human herpesvirus<br>Inflammation<br>Influenza<br>Ischemia<br>Keloid<br>Liver, disease<br>Menopause<br>Neoplasm<br>Oxidative stress, biological<br>Pain<br>Preeclampsia<br>Psoriasis<br>Rheumatoid arthritis<br>Soybean (Glycine max)<br>Tarchonanthus camphoratus<br>(pharmaceutical, dietetic and cosmetic compns. based on tioctic acid<br>and cysteine)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| IT | 52-90-4, Cysteine, biological studies 56-84-8, Aspartic acid, biological studies 56-85-9, Glutamine, biological studies 56-86-0, Glutamic acid, biological studies 58-61-7, Adenosine, biological studies 58-61-7D, Adenosine, derivs., biological studies 59-30-3, Folic acid, biological studies 73-31-4, Melatonin 79-83-4, Pantothenic acid 97-59-6, Allantoin 303-98-0, Coenzyme q10 501-36-0, Resveratrol 541-15-1D, Carnitine, derivs. 616-91-1, N-Acetylcysteine 638-23-3 1077-28-7, Thioctic acid 1406-18-4, Vitamin e 7440-50-8, Copper, biological studies 7440-66-6, Zinc, biological studies 7782-49-2, Selenium, biological studies 12001-76-2, Vitamin b 87259-20-9 142959-59-9 292819-47-7<br>RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)<br>(pharmaceutical, dietetic and cosmetic compns. based on tioctic acid<br>and cysteine) |
| IT | 303-98-0, Coenzyme q10<br>RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)<br>(pharmaceutical, dietetic and cosmetic compns. based on tioctic acid<br>and cysteine)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| RN | 303-98-0 ZCAPLUS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| CN | 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

Double bond geometry as shown.



PAGE 1-C



OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS  
 RECORD (13 CITINGS)  
 REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 30 OF 41 ZCPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2000:573651 ZCPLUS Full-text  
 DOCUMENT NUMBER: 133:159948  
 TITLE: Ubiquinone Qn for pain treatment  
 INVENTOR(S): Enzmann, Franz  
 PATENT ASSIGNEE(S): MSE Pharmazeutika G.m.b.H., Germany  
 SOURCE: PCT Int. Appl., 7 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

| PATENT NO.                                                                    | KIND | DATE     | APPLICATION NO.  | DATE         |
|-------------------------------------------------------------------------------|------|----------|------------------|--------------|
| WO 2000047192                                                                 | A2   | 20000817 | WO 2000-EP1011   | 20000209 <-- |
| WO 2000047192                                                                 | A3   | 20010412 |                  |              |
| W: CA, JP, US                                                                 |      |          |                  |              |
| RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,<br>PT, SE |      |          |                  |              |
| DE 19905879                                                                   | A1   | 20000817 | DE 1999-19905879 | 19990211 <-- |
| CA 2362577                                                                    | A1   | 20000817 | CA 2000-2362577  | 20000209 <-- |
| EP 1150682                                                                    | A2   | 20011107 | EP 2000-914075   | 20000209 <-- |
| EP 1150682                                                                    | B1   | 20050817 |                  |              |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,            |      |          |                  |              |

IE, FI

|                        |             |                  |                 |
|------------------------|-------------|------------------|-----------------|
| AT 302009              | T 20050915  | AT 2000-914075   | 20000209 <--    |
| ES 2243243             | T3 20051201 | ES 2000-914075   | 20000209 <--    |
| US 20040034107         | A1 20040219 | US 2003-424987   | 20030429 <--    |
| PRIORITY APPLN. INFO.: |             | DE 1999-19905879 | A 19990211 <--  |
|                        |             | WO 2000-EP1011   | W 20000209 <--  |
|                        |             | US 2001-890276   | B1 20010810 <-- |

AB Ubiquinone Qn and its precursors can be used in the oral, parenteral, local, inhalative, or intranasal treatment of neurogenic pain, migraine, or pain resulting from dialysis, herpes zoster, cancer, etc. (no data).

IC ICM A61K031-00

CC 1-11 (Pharmacology)

IT Drug delivery systems

(topical; ubiquinone Qn for pain treatment)

IT Analgesics

Neoplasm

(ubiquinone Qn for pain treatment)

IT 303-98-0, Ubiquinone Q10

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(ubiquinone Qn for pain treatment)

IT 303-98-0, Ubiquinone Q10

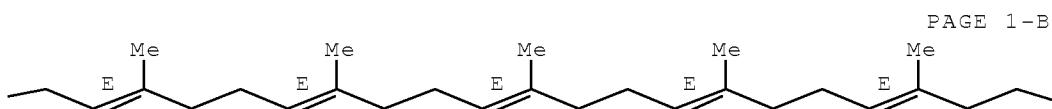
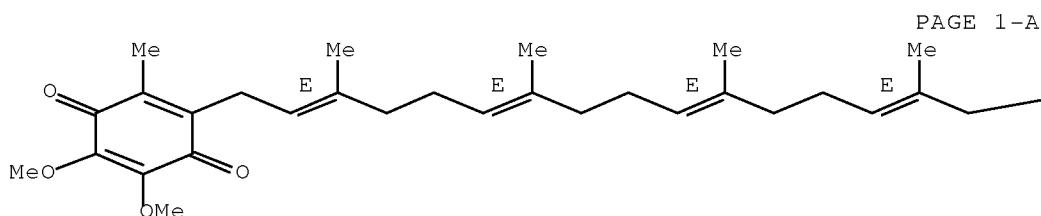
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(ubiquinone Qn for pain treatment)

RN 303-98-0 ZCAPLUS

CN 2,5-Cyclohexadiene-1,4-dione, 2-[(2E,6E,10E,14E,18E,22E,26E,30E,34E)-3,7,11,15,19,23,27,31,35,39-decamethyl-2,6,10,14,18,22,26,30,34,38-tetracontadecaen-1-yl]-5,6-dimethoxy-3-methyl- (CA INDEX NAME)

Double bond geometry as shown.



==== CMe2

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)  
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L88 ANSWER 31 OF 41 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2004297788 EMBASE Full-text

TITLE: [Free radicals: Oxidative stress makes the skin look old].  
Freie Radikale: Oxidativer stress lässt die haut alt aussehen.

AUTHOR: Stolzling, Alexandra (correspondence); Grune, Tilman

AUTHOR: Grune, Tilman

AUTHOR: Stolzling, Alexandra (correspondence)

CORPORATE SOURCE: Neurowissenschaft. Forschungszentrum, Medizinische Fakultät (Charite), Schumannstrasse 20/21, 10089 Berlin, Germany.

AUTHOR: Grune, Tilman

CORPORATE SOURCE: Inst. F Umweltmedizinische Forschung,  
Heinrich-Heine-Universität, Auf'm Hennekamp 50, 40225 Dusseldorf, Germany.

SOURCE: Pharmazeutische Zeitung, (24 Jun 2004) Vol. 149, No. 26, pp. 16-21.

ISSN: 0031-7136 CODEN: PZSED5

COUNTRY: Germany

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 013 Dermatology and Venereology  
029 Clinical and Experimental Biochemistry  
030 Clinical and Experimental Pharmacology  
037 Drug Literature Index  
005 General Pathology and Pathological Anatomy

LANGUAGE: German

ENTRY DATE: Entered STN: 12 Aug 2004  
Last Updated on STN: 12 Aug 2004

CONTROLLED TERM: Medical Descriptors:  
aging  
article  
cell proliferation  
\*cutaneous parameters  
dermis  
DNA damage  
DNA repair  
drug effect  
drug mechanism  
epidermis  
human  
keratinocyte  
light exposure  
lipid peroxidation  
melanocyte

metabolism  
 oxidation reduction reaction  
 \*oxidative stress  
 protein degradation  
 signal transduction  
 skin carcinogenesis  
 skin fibroblast  
 skin protection  
 stratum corneum  
 subcutaneous tissue  
 ultraviolet A radiation  
 ultraviolet B radiation  
 ultraviolet C radiation

## CONTROLLED TERM:

Drug Descriptors:

adenosine triphosphate: EC, endogenous compound  
 alpha tocopherol: PD, pharmacology  
 antioxidant: PD, pharmacology  
 antioxidant: TP, topical drug administration  
 ascorbic acid: PD, pharmacology  
 ascorbic acid: TP, topical drug administration  
 beta carotene: PD, pharmacology  
 bgp 15m  
 catalase: EC, endogenous compound  
 DNA: EC, endogenous compound  
 endonuclease: EC, endogenous compound  
 epigallocatechin: PD, pharmacology  
 epigallocatechin: TP, topical drug administration  
 \*free radical: EC, endogenous compound  
 glutathione reductase: EC, endogenous compound  
 heat shock protein 70: EC, endogenous compound  
 malonaldehyde: EC, endogenous compound  
 melatonin: PD, pharmacology  
 melatonin: TP, topical drug administration  
 messenger RNA: EC, endogenous compound  
 nicotinamide adenine dinucleotide: EC, endogenous compound  
 nicotinamide adenine dinucleotide adenosine diphosphate  
 ribosyltransferase: EC, endogenous compound  
 nicotinamide adenine dinucleotide adenosine diphosphate  
 ribosyltransferase inhibitor: PD, pharmacology  
 nitric oxide synthase: EC, endogenous compound  
 oxidoreductase: EC, endogenous compound  
 polydeoxyribonucleotide synthase: PD, pharmacology  
 polydeoxyribonucleotide synthase: TP, topical drug administration  
 polyphenol: PO, oral drug administration  
 polyphenol: PD, pharmacology  
 polyphenol: TP, topical drug administration  
 protein: EC, endogenous compound  
 reactive oxygen metabolite: EC, endogenous compound  
 retinol: PD, pharmacology  
 selenium: PD, pharmacology  
 superoxide dismutase: EC, endogenous compound  
 ubidecarenone: PD, pharmacology  
 ubidecarenone: TP, topical drug administration  
 ubiquinone: PD, pharmacology  
 ubiquinone: TP, topical drug administration  
 unindexed drug  
 (adenosine triphosphate) 15237-44-2, 56-65-5, 987-65-5;  
 (alpha tocopherol) 1406-18-4, 1406-70-8, 52225-20-4,  
 58-95-7, 59-02-9; (ascorbic acid) 134-03-2, 15421-15-5,

## CAS REGISTRY NO.:

50-81-7; (beta carotene) 7235-40-7; (catalase) 9001-05-2;  
 (DNA) 9007-49-2; (endonuclease) 9055-11-2;  
 (epigallocatechin) 970-74-1; (glutathione reductase)  
 9001-48-3; (malonaldehyde) 542-78-9; (melatonin) 73-31-4;  
 (nicotinamide adenine dinucleotide adenosine diphosphate  
 ribosyltransferase) 58319-92-9; (nicotinamide adenine  
 dinucleotide) 53-84-9; (nitric oxide synthase) 125978-95-2;  
 (oxidoreductase) 9035-73-8, 9035-82-9, 9037-80-3,  
 9055-15-6; (polydeoxyribonucleotide synthase) 9015-85-4;  
 (polyphenol) 37331-26-3; (protein) 67254-75-5; (retinol)  
 68-26-8, 82445-97-4; (selenium) 7782-49-2; (superoxide  
 dismutase) 37294-21-6, 9016-01-7, 9054-89-1;  
 (ubidecarenone) 303-98-0; (ubiquinone) 1339-63-5

CHEMICAL NAME: bgp 15m

L88 ANSWER 32 OF 41 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2003466982 EMBASE Full-text

TITLE: Topical vitamins, minerals and botanical ingredients as modulators of environmental and chronological skin damage.

AUTHOR: Chiu, A.; Kimball, A.B. (correspondence)

CORPORATE SOURCE: Department of Dermatology, Stanford Univ. School of Medicine, RM W0024, 900 Blake Wilbur Drive, Stanford, CA 94305-5334, United States. akimball@leland.stanford.edu

SOURCE: British Journal of Dermatology, (Oct 2003) Vol. 149, No. 4, pp. 681-691.

Refs: 107

ISSN: 0007-0963 CODEN: BJDEAZ

COUNTRY: United Kingdom

DOCUMENT TYPE: Journal; General Review; (Review)

FILE SEGMENT: 013 Dermatology and Venereology  
 020 Gerontology and Geriatrics  
 037 Drug Literature Index  
 039 Pharmacy

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 30 Dec 2003

Last Updated on STN: 30 Dec 2003

ABSTRACT: Ageing skin is characterized by fine lines, wrinkles, lentigines, dyspigmentation and increased coarseness. Topical preparations alleged to combat these changes abound in the over-the-counter market. Some of the most popular ingredients used in these products are vitamins, minerals and botanical extracts. Proposed mechanisms for antiageing effects on skin range from antioxidant properties to improved collagen synthesis or protection from collagen breakdown. Despite the media attention and consumer popularity that these ingredients have generated, there have been few scientific studies to support these claims. In this report, we review recent published studies on the most common of these ingredients for the topical photoprotection and the treatment of ageing skin.

CONTROLLED TERM: Medical Descriptors:

acne vulgaris: DT, drug therapy

\*aging

alga

antiinflammatory activity

antineoplastic activity

antioxidant activity

clinical trial

coarse skin: DT, drug therapy

coarse skin: PC, prevention

collagen synthesis  
 drug effect  
 drug efficacy  
 drug formulation  
 drug mechanism  
 drug penetration  
 drug stability  
 ginseng  
 grape  
 herbal medicine  
 human  
 lemon  
 lentigo: DT, drug therapy  
 lentigo: PC, prevention  
 \*light damage: DT, drug therapy  
 \*light damage: PC, prevention  
 nonhuman  
 pigment disorder: DT, drug therapy  
 pigment disorder: PC, prevention  
 priority journal  
 radiation injury: DT, drug therapy  
 radiation injury: ET, etiology  
 radiation injury: PC, prevention  
 review  
 rosemary  
 seaweed  
 \*skin defect: DT, drug therapy  
 \*skin defect: ET, etiology  
 \*skin defect: PC, prevention  
 skin protection  
 skin surface  
 tea  
 ultraviolet radiation  
**CONTROLLED TERM:**  
**Drug Descriptors:**  
 Aloe vera extract  
 alpha tocopherol: CT, clinical trial  
 alpha tocopherol: CB, drug combination  
 alpha tocopherol: CM, drug comparison  
 alpha tocopherol: DT, drug therapy  
 alpha tocopherol: PD, pharmacology  
 alpha tocopherol: TP, topical drug administration  
 ascorbic acid: CT, clinical trial  
 ascorbic acid: CB, drug combination  
 ascorbic acid: CM, drug comparison  
 ascorbic acid: DT, drug therapy  
 ascorbic acid: PR, pharmaceutics  
 ascorbic acid: PD, pharmacology  
 ascorbic acid: TP, topical drug administration  
 ascorbyl palmitate: CM, drug comparison  
 ascorbyl palmitate: PK, pharmacokinetics  
 ascorbyl palmitate: PD, pharmacology  
 ascorbyl palmitate: TP, topical drug administration  
 ascorbyl phosphate: PD, pharmacology  
 ascorbyl phosphate: TP, topical drug administration  
 black tea extract: CT, clinical trial  
 black tea extract: DT, drug therapy  
 black tea extract: PD, pharmacology  
 black tea extract: TP, topical drug administration  
 cellex c  
 cosmetic

cucumber extract  
dexpanthenol  
essential oil: PD, pharmacology  
essential oil: TP, topical drug administration  
flavonoid: PD, pharmacology  
Ginkgo biloba extract: CB, drug combination  
Ginkgo biloba extract: PD, pharmacology  
grape seed extract: PD, pharmacology  
grape seed extract: TP, topical drug administration  
green tea extract: CT, clinical trial  
green tea extract: DT, drug therapy  
green tea extract: PD, pharmacology  
green tea extract: TP, topical drug administration  
green tea polyphenol: CT, clinical trial  
green tea polyphenol: DT, drug therapy  
green tea polyphenol: PD, pharmacology  
green tea polyphenol: TP, topical drug administration  
Hamamelis extract  
\*mineral: CT, clinical trial  
\*mineral: DT, drug therapy  
\*mineral: PD, pharmacology  
\*mineral: TP, topical drug administration  
nicotinamide: CT, clinical trial  
nicotinamide: DT, drug therapy  
nicotinamide: PD, pharmacology  
nicotinamide: TP, topical drug administration  
non prescription drug: DT, drug therapy  
non prescription drug: PD, pharmacology  
non prescription drug: TP, topical drug administration  
peppermint extract  
\*plant extract: CT, clinical trial  
\*plant extract: DT, drug therapy  
\*plant extract: PD, pharmacology  
\*plant extract: TP, topical drug administration  
retinol: CT, clinical trial  
retinol: CM, drug comparison  
retinol: DT, drug therapy  
retinol: PD, pharmacology  
retinol: TP, topical drug administration  
retinol palmitate: DT, drug therapy  
retinol palmitate: PD, pharmacology  
retinol palmitate: TP, topical drug administration  
soybean protein: CT, clinical trial  
soybean protein: DT, drug therapy  
soybean protein: PD, pharmacology  
soybean protein: TP, topical drug administration  
trolox C: PD, pharmacology  
trolox C: TP, topical drug administration  
ubidecarenone: CT, clinical trial  
ubidecarenone: DT, drug therapy  
ubidecarenone: PD, pharmacology  
ubidecarenone: TP, topical drug administration  
ubiquinone: CT, clinical trial  
ubiquinone: DT, drug therapy  
ubiquinone: PD, pharmacology  
ubiquinone: TP, topical drug administration  
unclassified drug  
unindexed drug  
\*vitamin: CT, clinical trial  
\*vitamin: DT, drug therapy

\*vitamin: PD, pharmacology  
 \*vitamin: TP, topical drug administration  
 wheat protein  
 CAS REGISTRY NO.: (alpha tocopherol) 1406-18-4, 1406-70-8, 52225-20-4,  
 58-95-7, 59-02-9; (ascorbic acid) 134-03-2, 15421-15-5,  
 50-81-7; (ascorbyl palmitate) 137-66-6; (dexpanthenol)  
 81-13-0; (nicotinamide) 11032-50-1, 98-92-0; (retinol  
 palmitate) 79-81-2; (retinol) 68-26-8, 82445-97-4; (soybean  
 protein) 9010-10-0; (trolox C) 56305-04-5;  
 (ubidecarenone) 303-98-0; (ubiquinone) 1339-63-5

CHEMICAL NAME: cellex c

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ACCESSION NUMBER: 2003246099 EMBASE Full-text

TITLE: Coenzyme Q10: One antioxidant, many promising applications.

AUTHOR: Horowitz, Sala

SOURCE: Alternative and Complementary Therapies, (Jun 2003) Vol. 9, No. 3, pp. 111-116.

Refs: 34

ISSN: 1076-2809 CODEN: ACTHFZ

COUNTRY: United States

DOCUMENT TYPE: Journal; Article

FILE SEGMENT: 030 Clinical and Experimental Pharmacology

037 Drug Literature Index

038 Adverse Reactions Titles

LANGUAGE: English

ENTRY DATE: Entered STN: 3 Jul 2003

Last Updated on STN: 3 Jul 2003

CONTROLLED TERM: Medical Descriptors:

acquired immune deficiency syndrome: DT, drug therapy

Alzheimer disease: DT, drug therapy

\*antioxidant activity

article

asthma: DT, drug therapy

biochemistry

cancer

cardiotoxicity: SI, side effect

diabetes mellitus: DT, drug therapy

disorders of mitochondrial functions: DT, drug therapy

drug cross reactivity

drug formulation

\*enzyme structure

heart disease: DT, drug therapy

human

male infertility: DT, drug therapy

muscle disease: DT, drug therapy

myopathy: SI, side effect

nerve cell lesion: SI, side effect

Parkinson disease: DT, drug therapy

periodontal disease: DT, drug therapy

side effect: SI, side effect

sinusitis: SI, side effect

skin disease: DT, drug therapy

sore throat: SI, side effect

structure activity relation

treatment indication

virus infection: SI, side effect

CONTROLLED TERM: Drug Descriptors:

acetohexamide: IT, drug interaction  
alpha tocopherol: IT, drug interaction  
alpha tocopherol succinate: PD, pharmacology  
antidepressant agent: IT, drug interaction  
antidiabetic agent: IT, drug interaction  
antineoplastic agent: IT, drug interaction  
ascorbic acid: PD, pharmacology  
beta adrenergic receptor blocking agent: IT, drug interaction  
beta carotene: PD, pharmacology  
carnitine: IT, drug interaction  
cholinergic receptor blocking agent: AE, adverse drug reaction  
cholinergic receptor blocking agent: DT, drug therapy  
dermatological agent: PD, pharmacology  
dermatological agent: TP, topical drug administration  
dopamine receptor stimulating agent: AE, adverse drug reaction  
dopamine receptor stimulating agent: DT, drug therapy  
doxorubicin: AE, adverse drug reaction  
doxorubicin: IT, drug interaction  
entacapone: AE, adverse drug reaction  
entacapone: DT, drug therapy  
glibenclamide: IT, drug interaction  
hydroxymethylglutaryl coenzyme A reductase inhibitor: AE, adverse drug reaction  
hydroxymethylglutaryl coenzyme A reductase inhibitor: IT, drug interaction  
hypcholesterolemic agent: IT, drug interaction  
olive oil: PD, pharmacology  
olive oil: TP, topical drug administration  
pergolide mesilate: AE, adverse drug reaction  
pergolide mesilate: DT, drug therapy  
phenothiazine derivative: IT, drug interaction  
pramipexole: AE, adverse drug reaction  
pramipexole: DT, drug therapy  
ropinirole: AE, adverse drug reaction  
ropinirole: DT, drug therapy  
selegiline: AE, adverse drug reaction  
selegiline: DT, drug therapy  
selenium: PD, pharmacology  
sulfonylurea derivative: IT, drug interaction  
tolazamide: IT, drug interaction  
\*ubidecarenone: AE, adverse drug reaction  
\*ubidecarenone: AN, drug analysis  
\*ubidecarenone: IT, drug interaction  
\*ubidecarenone: PD, pharmacology  
ubiqgel  
unindexed drug  
warfarin: IT, drug interaction  
(acetohexamide) 968-81-0; (alpha tocopherol succinate)  
17407-37-3, 4345-03-3; (alpha tocopherol) 1406-18-4,  
1406-70-8, 52225-20-4, 58-95-7, 59-02-9; (ascorbic acid)  
134-03-2, 15421-15-5, 50-81-7; (beta carotene) 7235-40-7;  
(carnitine) 461-06-3, 541-15-1, 56-99-5; (doxorubicin)  
23214-92-8, 25316-40-9; (entacapone) 116314-67-1;  
(glibenclamide) 10238-21-8; (olive oil) 8001-25-0;  
(pergolide mesilate) 66104-23-2; (pramipexole) 104632-26-0;  
(ropinirole) 91374-21-9; (selegiline) 14611-51-9,  
14611-52-0, 2079-54-1, 2323-36-6; (selenium) 7782-49-2;

(tolazamide) 1156-19-0; (ubidecarenone) 303-98-0;  
 (warfarin) 129-06-6, 2610-86-8, 3324-63-8, 5543-58-8,  
 81-81-2

CHEMICAL NAME: (1) ubiqgel; coumadin; diabeta; dymelor; panwarfin;  
 sofarin; tolinase  
 COMPANY NAME: (1) Tishcon (United States)

L88 ANSWER 34 OF 41 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2003380391 EMBASE Full-text

TITLE: Cosmeceuticals: A review of the science behind the claims.

AUTHOR: Farris, Patricia K., Dr. (correspondence)

CORPORATE SOURCE: Department of Dermatology, Tulane University School of Medicine, New Orleans, LA, United States.

AUTHOR: Draelos, Zoe Diana; Elson, Melvin L.

SOURCE: Cosmetic Dermatology, (1 Mar 2003) Vol. 16, No. 3, pp. 59-60+64-66+69-70.

Refs: 64

ISSN: 1041-3766 CODEN: CDOEBQ

COUNTRY: United States

DOCUMENT TYPE: Journal; General Review; (Review)

FILE SEGMENT: 013 Dermatology and Venereology

030 Clinical and Experimental Pharmacology

037 Drug Literature Index

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 9 Oct 2003

Last Updated on STN: 9 Oct 2003

**ABSTRACT:** As dermatologists, we have the task of sorting through the little scientific information that is available to provide sound advice regarding skin-care products. This review describes some cosmeceuticals that have been subjected to well-designed clinical studies; however, more studies are needed to validate the claims of other products. Cosmeceuticals have indeed become an important part of our armamentarium, and we rely on continued research, development, and clinical testing to provide us with innovative and effective topical therapies for aging skin.

CONTROLLED TERM: Medical Descriptors:

- \*aging
- antiinflammatory activity
- antioxidant activity
- cell damage
- clinical trial
- drug formulation
- drug mechanism
- food and drug administration
- human
- review
- \*skin care
- \*skin defect: DT, drug therapy
- skin penetration
- sun exposure
- ultraviolet radiation

CONTROLLED TERM: Drug Descriptors:

- alpha tocopherol: DT, drug therapy
- alpha tocopherol: EC, endogenous compound
- alpha tocopherol: TP, topical drug administration
- \*antioxidant: CT, clinical trial
- \*antioxidant: DT, drug therapy
- \*antioxidant: EC, endogenous compound

\*antioxidant: PD, pharmacology  
\*antioxidant: TP, topical drug administration  
ascorbic acid: DT, drug therapy  
ascorbic acid: EC, endogenous compound  
ascorbic acid: TP, topical drug administration  
catalase: EC, endogenous compound  
collagen: EC, endogenous compound  
\*copper peptide: CT, clinical trial  
\*copper peptide: DT, drug therapy  
\*copper peptide: PD, pharmacology  
\*copper peptide: TP, topical drug administration  
\*cosmetic: CT, clinical trial  
\*cosmetic: DT, drug therapy  
\*cosmetic: PD, pharmacology  
\*cosmetic: TP, topical drug administration  
\*deanol: CT, clinical trial  
\*deanol: DT, drug therapy  
\*deanol: TP, topical drug administration  
elastin: EC, endogenous compound  
free radical: EC, endogenous compound  
glucose 6 phosphate dehydrogenase: EC, endogenous compound  
glutathione: EC, endogenous compound  
glutathione peroxidase: EC, endogenous compound  
glycosaminoglycan: EC, endogenous compound  
\*growth factor: CT, clinical trial  
\*growth factor: DT, drug therapy  
\*growth factor: PD, pharmacology  
\*growth factor: TP, topical drug administration  
immunoglobulin enhancer binding protein: EC, endogenous compound  
interleukin 1: EC, endogenous compound  
interleukin 6: EC, endogenous compound  
interleukin 8: EC, endogenous compound  
kinetin: CT, clinical trial  
kinetin: DT, drug therapy  
kinetin: TP, topical drug administration  
\*nicotinamide: CT, clinical trial  
\*nicotinamide: DT, drug therapy  
\*nicotinamide: PD, pharmacology  
\*nicotinamide: TP, topical drug administration  
non prescription drug: CT, clinical trial  
non prescription drug: DT, drug therapy  
non prescription drug: TP, topical drug administration  
protein lysine 6 oxidase: EC, endogenous compound  
retinoid: DT, drug therapy  
retinoid: TP, topical drug administration  
superoxide dismutase: EC, endogenous compound  
thioctic acid: CT, clinical trial  
thioctic acid: DT, drug therapy  
thioctic acid: PD, pharmacology  
thioctic acid: TP, topical drug administration  
transcription factor AP 1: EC, endogenous compound  
tumor necrosis factor alpha: EC, endogenous compound  
ubidecarenone: CT, clinical trial  
ubidecarenone: DT, drug therapy  
ubidecarenone: PD, pharmacology  
ubidecarenone: TP, topical drug administration  
unclassified drug  
unindexed drug

CAS REGISTRY NO.: (alpha tocopherol) 1406-18-4, 1406-70-8, 52225-20-4,

58-95-7, 59-02-9; (ascorbic acid) 134-03-2, 15421-15-5,  
 50-81-7; (catalase) 9001-05-2; (collagen) 9007-34-5;  
 (deanol) 108-01-0, 2498-25-1; (elastin) 9007-58-3; (glucose  
 6 phosphate dehydrogenase) 37259-83-9, 9001-40-5;  
 (glutathione peroxidase) 9013-66-5; (glutathione) 70-18-8;  
 (interleukin 8) 114308-91-7; (kinetin) 525-79-1;  
 (nicotinamide) 11032-50-1, 98-92-0; (protein lysine 6  
 oxidase) 99676-44-5; (superoxide dismutase) 37294-21-6,  
 9016-01-7, 9054-89-1; (thioctic acid) 1077-29-8, 1200-22-2,  
 2319-84-8, 62-46-4; (ubidecarenone) 303-98-0

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ACCESSION NUMBER: 2003033641 EMBASE Full-text

TITLE: Cutaneous photodamage, oxidative stress, and topical antioxidant protection.

AUTHOR: Pinnell, Sheldon R.

CORPORATE SOURCE: pinne002@mc.duke.edu

SOURCE: Journal of the American Academy of Dermatology, (1 Jan 2003) Vol. 48, No. 1, pp. 1-19.

Refs: 271

ISSN: 0190-9622 CODEN: JAADDB

COUNTRY: United States

DOCUMENT TYPE: Journal; General Review; (Review)

FILE SEGMENT: 013 Dermatology and Venereology

016 Cancer

037 Drug Literature Index

LANGUAGE: English

SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 30 Jan 2003

Last Updated on STN: 30 Jan 2003

ABSTRACT: New methods to protect skin from photodamage from sun exposure are necessary if we are to conquer skin cancer and photoaging. Sunscreens are useful, but their protection is not ideal because of inadequate use, incomplete spectral protection, and toxicity. Skin naturally uses antioxidants (AOs) to protect itself from photodamage. This scientific review summarizes what is known about how photodamage occurs; why sunscreens - the current gold standard of photoprotection - are inadequate; and how topical AOs help protect against skin cancer and photoaging changes. This review is intended to be a reference source, including pertinent comprehensive reviews whenever available. Although not all AOs are included, an attempt has been made to select those AOs for which sufficient information is available to document their potential topical uses and benefits. Reviewed are the following physiologic and plant AOs: vitamin C, vitamin E, selenium, zinc, silymarin, soy isoflavones, and tea polyphenols. Their topical use may favorably supplement sunscreen protection and provide additional anticarcinogenic protection.

CONTROLLED TERM: Medical Descriptors:

aging

chromatophore

clinical trial

drug effect

human

nonhuman

\*oxidative stress

\*photodermatoses: DT, drug therapy

\*photodermatoses: ET, etiology

\*photodermatoses: TH, therapy

pollution

priority journal

review  
 \*skin cancer: DT, drug therapy  
 \*skin cancer: ET, etiology  
 \*skin cancer: PC, prevention  
 skin carcinogenesis  
 skin protection  
 smoking  
 soybean  
 sun exposure  
 tea  
 technique  
 treatment indication  
 ultraviolet A radiation  
 ultraviolet B radiation  
**CONTROLLED TERM:** Drug Descriptors:  
 alpha tocopherol: CB, drug combination  
 alpha tocopherol: DO, drug dose  
 alpha tocopherol: IT, drug interaction  
 alpha tocopherol: DT, drug therapy  
 alpha tocopherol: PO, oral drug administration  
 alpha tocopherol: PD, pharmacology  
 alpha tocopherol: TP, topical drug administration  
 \*antioxidant: CT, clinical trial  
 \*antioxidant: DT, drug therapy  
 \*antioxidant: PD, pharmacology  
 \*antioxidant: TP, topical drug administration  
 ascorbic acid: CB, drug combination  
 ascorbic acid: DO, drug dose  
 ascorbic acid: IT, drug interaction  
 ascorbic acid: DT, drug therapy  
 ascorbic acid: PO, oral drug administration  
 ascorbic acid: PD, pharmacology  
 ascorbic acid: TP, topical drug administration  
 daidzein: CM, drug comparison  
 daidzein: PO, oral drug administration  
 daidzein: PD, pharmacology  
 daidzein: TP, topical drug administration  
 DNA: EC, endogenous compound  
 epigallocatechin gallate: PO, oral drug administration  
 epigallocatechin gallate: PD, pharmacology  
 epigallocatechin gallate: TP, topical drug administration  
 estradiol: CM, drug comparison  
 estradiol: PD, pharmacology  
 estrogen: CM, drug comparison  
 estrogen: PO, oral drug administration  
 estrogen: PD, pharmacology  
 estrogen: TP, topical drug administration  
 estrogen receptor: EC, endogenous compound  
 free radical: EC, endogenous compound  
 genistein: CM, drug comparison  
 genistein: PO, oral drug administration  
 genistein: PD, pharmacology  
 genistein: TP, topical drug administration  
 glutathione: EC, endogenous compound  
 glutathione peroxidase: EC, endogenous compound  
 glutathione reductase: EC, endogenous compound  
 immunoglobulin enhancer binding protein: EC, endogenous compound  
 isoflavone: CM, drug comparison  
 isoflavone: DT, drug therapy

isoflavone: PD, pharmacology  
 isoflavone: TP, topical drug administration  
 matrix metalloproteinase: EC, endogenous compound  
 phytoestrogen: PD, pharmacology  
 polyphenol: DT, drug therapy  
 polyphenol: PD, pharmacology  
 polyphenol: TP, topical drug administration  
 reactive oxygen metabolite: EC, endogenous compound  
 selenium: CT, clinical trial  
 selenium: DO, drug dose  
 selenium: DT, drug therapy  
 selenium: PO, oral drug administration  
 selenium: PD, pharmacology  
 selenium: TP, topical drug administration  
 silymarin: CT, clinical trial  
 silymarin: DO, drug dose  
 silymarin: DT, drug therapy  
 silymarin: PD, pharmacology  
 silymarin: TP, topical drug administration  
 sodium selenite: PO, oral drug administration  
 sodium selenite: PD, pharmacology  
 sunscreen  
 superoxide dismutase: EC, endogenous compound  
 ubidecarenone: EC, endogenous compound  
 urocanic acid: EC, endogenous compound  
 zinc: DT, drug therapy  
 zinc: PD, pharmacology  
 zinc: TP, topical drug administration

**CAS REGISTRY NO.:** (alpha tocopherol) 1406-18-4, 1406-70-8, 52225-20-4,  
 58-95-7, 59-02-9; (ascorbic acid) 134-03-2, 15421-15-5,  
 50-81-7; (daidzein) 486-66-8; (DNA) 9007-49-2;  
 (epigallocatechin gallate) 989-51-5; (estradiol) 50-28-2;  
 (genistein) 446-72-0; (glutathione peroxidase) 9013-66-5;  
 (glutathione reductase) 9001-48-3; (glutathione) 70-18-8;  
 (isoflavone) 574-12-9; (polyphenol) 37331-26-3; (selenium)  
 7782-49-2; (silymarin) 65666-07-1; (sodium selenite)  
 10102-18-8; (superoxide dismutase) 37294-21-6, 9016-01-7,  
 9054-89-1; (ubidecarenone) 303-98-0; (urocanic acid)  
 104-98-3; (zinc) 7440-66-6

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**ACCESSION NUMBER:** 1999391294 EMBASE Full-text  
**TITLE:** Antioxidants in cancer therapy; their actions and interactions with oncologic therapies.

**AUTHOR:** Lamson, Davis W. (correspondence); Brignall, Matthew S.  
**CORPORATE SOURCE:** Tahoma Clinic, Kent, WA, United States. mattandmolly@w-link.net

**AUTHOR:** Lamson, Davis W. (correspondence)  
**CORPORATE SOURCE:** Bastyr University, Kenmore, WA, United States.

**AUTHOR:** Lamson, Davis W. (correspondence)  
**CORPORATE SOURCE:** 9803 17th Ave. NE, Seattle, WA 98115, United States.

**AUTHOR:** Brignall, Matthew S.  
**CORPORATE SOURCE:** Bastyr University. mattandmolly@w-link.net

**SOURCE:** Alternative Medicine Review, (1999) Vol. 4, No. 5, pp. 304-329.  
 Refs: 180  
**ISSN:** 1089-5159 **CODEN:** ALMRFP

**COUNTRY:** United States  
**DOCUMENT TYPE:** Journal; General Review; (Review)

FILE SEGMENT:        016        Cancer  
                     030        Clinical and Experimental Pharmacology  
                     037        Drug Literature Index  
                     038        Adverse Reactions Titles

LANGUAGE:           English

SUMMARY LANGUAGE:   English

ENTRY DATE:          Entered STN: 2 Dec 1999

                    Last Updated on STN: 2 Dec 1999

**ABSTRACT:** There is a concern that antioxidants might reduce oxidizing free radicals created by radiotherapy and some forms of chemotherapy, and thereby decrease the effectiveness of the therapy. The question has arisen whether concurrent administration of oral antioxidants is contraindicated during cancer therapeutics. Evidence reviewed here demonstrates exogenous antioxidants alone produce beneficial effects in various cancers, and except for a few specific cases, animal and human studies demonstrate no reduction of efficacy of chemotherapy or radiation when given with antioxidants. In fact, considerable data exists showing increased effectiveness of many cancer therapeutic agents, as well as a decrease in adverse effects, when given concurrently with antioxidants.

CONTROLLED TERM:     Medical Descriptors:  
                          alternative medicine  
                          \*antioxidant activity  
                          bone marrow toxicity: SI, side effect  
                          breast cancer: DR, drug resistance  
                          breast cancer: DT, drug therapy  
                          \*cancer: DT, drug therapy  
                          \*cancer chemotherapy  
                          cancer combination chemotherapy  
                          cancer radiotherapy  
                          cardiototoxicity: SI, side effect  
                          diet supplementation  
                          drug efficacy  
                          gastrointestinal toxicity: SI, side effect  
                          head and neck cancer: DT, drug therapy  
                          human  
                          intraperitoneal drug administration  
                          intravenous drug administration  
                          lung cancer: DT, drug therapy  
                          melanoma: DT, drug therapy  
                          nephrotoxicity: ET, etiology  
                          nephrotoxicity: SI, side effect  
                          nonhuman  
                          oral drug administration  
                          review  
                          topical drug administration  
                          uterine cervix cancer: DT, drug therapy  
                          uterine cervix cancer: RF, radiotherapy  
                          \*vitamin intake

CONTROLLED TERM:     Drug Descriptors:  
                          acetylcysteine: AE, adverse drug reaction  
                          acetylcysteine: CB, drug combination  
                          acetylcysteine: DO, drug dose  
                          acetylcysteine: IT, drug interaction  
                          acetylcysteine: DT, drug therapy  
                          \*alpha tocopherol: AD, drug administration  
                          \*alpha tocopherol: CB, drug combination  
                          \*alpha tocopherol: DO, drug dose  
                          \*alpha tocopherol: IT, drug interaction  
                          \*alpha tocopherol: DT, drug therapy

\*alpha tocopherol: PD, pharmacology  
alpha2a interferon: CB, drug combination  
alpha2a interferon: DT, drug therapy  
\*antineoplastic agent: AE, adverse drug reaction  
\*antineoplastic agent: CB, drug combination  
\*antineoplastic agent: IT, drug interaction  
\*antineoplastic agent: DT, drug therapy  
\*antineoplastic agent: TO, drug toxicity  
antineoplastic alkaloid: CB, drug combination  
antineoplastic alkaloid: IT, drug interaction  
antineoplastic alkaloid: DT, drug therapy  
antineoplastic antibiotic: AE, adverse drug reaction  
antineoplastic antibiotic: CB, drug combination  
antineoplastic antibiotic: IT, drug interaction  
antineoplastic antibiotic: DT, drug therapy  
antineoplastic antimetabolite: CB, drug combination  
antineoplastic antimetabolite: IT, drug interaction  
antineoplastic antimetabolite: DT, drug therapy  
\*antioxidant: AD, drug administration  
\*antioxidant: CB, drug combination  
\*antioxidant: DO, drug dose  
\*antioxidant: IT, drug interaction  
\*antioxidant: DT, drug therapy  
\*antioxidant: PD, pharmacology  
\*ascorbic acid: AD, drug administration  
\*ascorbic acid: CB, drug combination  
\*ascorbic acid: DO, drug dose  
\*ascorbic acid: IT, drug interaction  
\*ascorbic acid: DT, drug therapy  
\*ascorbic acid: PD, pharmacology  
\*beta carotene: AD, drug administration  
\*beta carotene: CB, drug combination  
\*beta carotene: DO, drug dose  
\*beta carotene: IT, drug interaction  
\*beta carotene: DT, drug therapy  
\*beta carotene: PD, pharmacology  
bleomycin: CB, drug combination  
bleomycin: IT, drug interaction  
bleomycin: DT, drug therapy  
camptothecin derivative: CB, drug combination  
camptothecin derivative: IT, drug interaction  
camptothecin derivative: DT, drug therapy  
\*carotenoid: AD, drug administration  
\*carotenoid: CB, drug combination  
\*carotenoid: DO, drug dose  
\*carotenoid: IT, drug interaction  
\*carotenoid: DT, drug therapy  
\*carotenoid: PD, pharmacology  
cisplatin: AE, adverse drug reaction  
cisplatin: CB, drug combination  
cisplatin: IT, drug interaction  
cisplatin: DT, drug therapy  
cisplatin: TO, drug toxicity  
doxorubicin: AE, adverse drug reaction  
doxorubicin: CB, drug combination  
doxorubicin: IT, drug interaction  
doxorubicin: DT, drug therapy  
ebselen: CB, drug combination  
ebselen: DO, drug dose  
ebselen: IT, drug interaction

ebselen: DT, drug therapy  
 epirubicin: AE, adverse drug reaction  
 epirubicin: CB, drug combination  
 epirubicin: IT, drug interaction  
 epirubicin: DT, drug therapy  
 etoposide: CB, drug combination  
 etoposide: IT, drug interaction  
 etoposide: DT, drug therapy  
 flavonoid: CB, drug combination  
 flavonoid: DO, drug dose  
 flavonoid: IT, drug interaction  
 flavonoid: DT, drug therapy  
 fluorouracil: CB, drug combination  
 fluorouracil: IT, drug interaction  
 fluorouracil: DT, drug therapy  
 glutathione: CB, drug combination  
 glutathione: DO, drug dose  
 glutathione: IT, drug interaction  
 glutathione: DT, drug therapy  
 melatonin: CB, drug combination  
 melatonin: DO, drug dose  
 melatonin: IT, drug interaction  
 melatonin: DT, drug therapy  
 methotrexate: CB, drug combination  
 methotrexate: IT, drug interaction  
 methotrexate: DT, drug therapy  
 paclitaxel: CB, drug combination  
 paclitaxel: IT, drug interaction  
 paclitaxel: DT, drug therapy  
 platinum derivative: AE, adverse drug reaction  
 platinum derivative: CB, drug combination  
 platinum derivative: IT, drug interaction  
 platinum derivative: DT, drug therapy  
 \*retinoic acid: AD, drug administration  
 \*retinoic acid: DO, drug dose  
 \*retinoic acid: DT, drug therapy  
 \*retinoic acid: PD, pharmacology  
 selenium: CB, drug combination  
 selenium: DO, drug dose  
 selenium: IT, drug interaction  
 selenium: DT, drug therapy  
 tamoxifen: CB, drug combination  
 tamoxifen: IT, drug interaction  
 tamoxifen: DT, drug therapy  
 ubidecarenone: CB, drug combination  
 ubidecarenone: DO, drug dose  
 ubidecarenone: IT, drug interaction  
 ubidecarenone: DT, drug therapy  
 unindexed drug

CAS REGISTRY NO.: (acetylcysteine) 616-91-1; (alpha tocopherol) 1406-18-4,  
 1406-70-8, 52225-20-4, 58-95-7, 59-02-9; (alpha2a  
 interferon) 76543-88-9; (ascorbic acid) 134-03-2,  
 15421-15-5, 50-81-7; (beta carotene) 7235-40-7; (bleomycin)  
 11056-06-7; (cisplatin) 15663-27-1, 26035-31-4, 96081-74-2;  
 (doxorubicin) 23214-92-8, 25316-40-9; (ebselen) 60940-34-3;  
 (epirubicin) 56390-09-1, 56420-45-2; (etoposide)  
 33419-42-0; (fluorouracil) 51-21-8; (glutathione) 70-18-8;  
 (melatonin) 73-31-4; (methotrexate) 15475-56-6, 59-05-2,  
 7413-34-5; (paclitaxel) 33069-62-4; (retinoic acid)  
 302-79-4; (selenium) 7782-49-2; (tamoxifen) 10540-29-1;

(ubidecarenone) 303-98-0

L88 ANSWER 37 OF 41 EMBASE COPYRIGHT (c) 2010 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 1987006106 EMBASE Full-text  
 TITLE: An analytical study on the mechanism of Coenzyme Q10 enhancement of the effect of adriamycin in cultured mouse sarcoma cells.  
 AUTHOR: Toda, K.  
 SOURCE: Practica Otologica, (1986) Vol. 79, No. 9, pp. 1515-1529.  
 CODEN: JIBIAG  
 COUNTRY: Japan  
 DOCUMENT TYPE: Journal  
 FILE SEGMENT: 037 Drug Literature Index  
 LANGUAGE: Japanese  
 SUMMARY LANGUAGE: English  
 ENTRY DATE: Entered STN: 11 Dec 1991  
 Last Updated on STN: 11 Dec 1991  
 CONTROLLED TERM: Medical Descriptors:  
   animal cell  
   \*dna synthesis  
   \*dose response  
   drug response  
   \*flow cytometry  
   in vitro study  
   mouse  
   nonhuman  
   pharmacokinetics  
   topical drug administration  
 CONTROLLED TERM: Drug Descriptors:  
   \*doxorubicin  
   radioisotope  
   \*ubidecarenone  
 CAS REGISTRY NO.: (doxorubicin) 23214-92-8, 25316-40-9; (ubidecarenone)  
 303-98-0

L88 ANSWER 38 OF 41 BIOSIS COPYRIGHT (c) 2010 The Thomson Corporation on STN

ACCESSION NUMBER: 2005:319512 BIOSIS Full-text  
 DOCUMENT NUMBER: PREV200510114907  
 TITLE: Topical formulation of coenzyme Q10 inhibits the growth of melanoma tumors.  
 AUTHOR(S): Narain, N. R. [Reprint Author]; Li, J.; He, J.; Malik, L. H.; Russell, K. J.; Woan, K. V.; Persaud, I.; Hsia, S. L.  
 CORPORATE SOURCE: Univ Miami, Sch Med, Miami, FL USA  
 SOURCE: Journal of Investigative Dermatology, (MAR 2004) Vol. 122, No. 3, pp. A160.  
 Meeting Info.: 65th Annual Meeting of the Society-for-Investigative-Dermatology. Providence, RI, USA.  
 April 28 -May 01, 2004. Soc Investigat Dermatol.  
 CODEN: JIDEAE. ISSN: 0022-202X.  
 DOCUMENT TYPE: Conference; (Meeting)  
                   Conference; Abstract; (Meeting Abstract)  
 LANGUAGE: English  
 ENTRY DATE: Entered STN: 25 Aug 2005  
 CONCEPT CODE: Last Updated on STN: 25 Aug 2005  
                   General biology - Symposia, transactions and proceedings  
                   00520  
                   Cytology - Animal    02506  
                   Cytology - Human    02508

INDEX TERMS: Pathology - Therapy 12512  
 Pharmacology - General 22002  
 Pharmacology - Clinical pharmacology 22005  
 Neoplasms - Pathology, clinical aspects and systemic effects 24004  
 Neoplasms - Therapeutic agents and therapy 24008  
 Major Concepts  
     Pharmacology; Tumor Biology  
 INDEX TERMS: Diseases  
     melanoma: neoplastic disease  
     Melanoma (MeSH)  
 INDEX TERMS: Chemicals & Biochemicals  
     coenzyme Q10; liposome-encapsulated Q10 cream:  
     antineoplastic-drug, topical administration  
 INDEX TERMS: Methods & Equipment  
     transfection: laboratory techniques, genetic techniques;  
     histological examination: laboratory techniques,  
     histology and cytology techniques  
 ORGANISM: Classifier  
     Hominidae 86215  
 Super Taxa  
     Primates; Mammalia; Vertebrata; Chordata; Animalia  
 Organism Name  
     SKMEL28 cell line (cell\_line)  
 Taxa Notes  
     Animals, Chordates, Humans, Mammals, Primates,  
     Vertebrates  
 ORGANISM: Classifier  
     Muridae 86375  
 Super Taxa  
     Rodentia; Mammalia; Vertebrata; Chordata; Animalia  
 Organism Name  
     mouse (common)  
 Taxa Notes  
     Animals, Chordates, Mammals, Nonhuman Vertebrates,  
     Nonhuman Mammals, Rodents, Vertebrates  
 REGISTRY NUMBER: 303-98-0 (coenzyme Q10)

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STN

ACCESSION NUMBER: 2003:369491 BIOSIS Full-text

DOCUMENT NUMBER: PREV200300369491

TITLE: Topical coenzyme Q10: comparative absorption and long-term antioxidant effects in human skin of two products with young and older subjects.

AUTHOR(S): Vinson, Joe Allen [Reprint Author]; Anamandla, Sunil  
COPORATE SOURCE: Chemistry, University of Scranton, Linden and Monroe Streets, Scranton, PA, 18510, USA  
vinson@uofs.edu; amandalas2@uofs.edu

SOURCE: FASEB Journal, (March 2003) Vol. 17, No. 4-5, pp.  
Abstract No. 694.4. <http://www.fasebj.org/>. e-file.  
Meeting Info.: FASEB Meeting on Experimental Biology:  
Translating the Genome. San Diego, CA, USA. April 11-15, 2003. FASEB.  
ISSN: 0892-6638 (ISSN print).

DOCUMENT TYPE: Conference; (Meeting)  
Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 13 Aug 2003

Last Updated on STN: 13 Aug 2003

Ordered  
4/22/10

**ABSTRACT:** Skin cancer is the fastest growing cancer in the US, and is primarily caused by excessive sun exposure. UV radiation produces free radicals in skin that damage the DNA, initiating the cancer process. Wrinkles are a result of the aging process and are accelerated with sun exposure. Antioxidants in the skin, such as ascorbate, tocopherol, and Coenzyme Q10H<sub>2</sub> react with the free radicals and detoxify them before they can cause damage and ultimately cancer. CoQ10 (Q10) is the form contained in cosmetics and capsules for human consumption. The elderly have lower levels of endogenous Q10 than younger subjects. We tested the absorption of two forms of Q10, the pure USP form and yeast (Q10+ from Pharmachem Laboratories). A lotion was prepared that was 1% by weight Q10. 75 mg of lotion was applied to the inner wrist of 9 subjects aged 50 or over, and 9 subjects aged < 30. After 1 hour the lotion was removed and Q10 extracted from the stratum corneum with ethanol and measured by HPLC. Elderly absorbed significantly more Q10 than did the young subjects. For both groups Q10+ was significantly more absorbed than USP. A 1-month study was begun with an initial ethanol extraction followed by twice-daily application of 75 mg of lotion. The two forms of Q10 were made into two lotions that were applied on opposite arms. After 1 month the ethanol extraction was performed. A washout period of one month ensued, followed by another extraction. Both forms significantly increased skin lipids, and significantly decreased skin hydrogen peroxide plus lipid hydroperoxides. Only the Q10+ significantly increased skin antioxidants. Q10+ was significantly more efficacious than USP Q10.

**CONCEPT CODE:** General biology - Symposia, transactions and proceedings  
00520  
Pathology - Therapy 12512  
Integumentary system - Physiology and biochemistry 18504  
Integumentary system - Pathology 18506  
Pharmacology - General 22002  
Pharmacology - Clinical pharmacology 22005

**INDEX TERMS:** Major Concepts  
Dermatology (Human Medicine, Medical Sciences);  
Pharmacology  
**INDEX TERMS:** Parts, Structures, & Systems of Organisms  
skin: integumentary system  
**INDEX TERMS:** Chemicals & Biochemicals  
coenzyme Q10: USP form, comparative absorption,  
long-term antioxidant effects, topical administration,  
yeast form  
**ORGANISM:** Classifier  
Hominidae 86215  
Super Taxa  
Primates; Mammalia; Vertebrata; Chordata; Animalia  
Organism Name  
human (common)  
Taxa Notes  
Animals, Chordates, Humans, Mammals, Primates,  
Vertebrates  
**REGISTRY NUMBER:** 303-98-0 (coenzyme Q10)

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STN

ACCESSION NUMBER: 1987:424327 BIOSIS Full-text  
DOCUMENT NUMBER: PREV198784090989; BA84:90989  
**TITLE:** TOPICAL COENZYME Q10 COQ 10 IN A PATIENT WITH  
RADIATION ULCERS.  
**AUTHOR(S):** SUGAI T [Reprint author]; ASOH S  
**CORPORATE SOURCE:** DEP DERMATOL, OSAKA KAISEI HOSP, OHYODO, OSAKA, JPN 531  
**SOURCE:** Hifu, (1987) Vol. 29, No. 2, pp. 326-329.  
CODEN: HIFUAG. ISSN: 0018-1390.

Ordered  
4/22/10

10/597378

DOCUMENT TYPE: Article  
FILE SEGMENT: BA  
LANGUAGE: JAPANESE  
ENTRY DATE: Entered STN: 9 Oct 1987  
Last Updated on STN: 9 Oct 1987

ABSTRACT:A 78-year-old woman had been treated due to late radiodermatitis on the hypogastric and gluteal regions these 11 years. She had received 60Co-radiation nine times over a period of 3 years, following an operation of uterus cancer in her 50 years of age. The total amount of radiation was unknown. She had been suffering from ulcers on the gluteal regions since 55 years in age. Since May, 1985, 0.5% ubiquinone (CoQ 10) ointment has been applied topically to the intractable ulcers, which were getting smaller and cleared 1 year later. The ointment seems to possess a specific effect on radiation ulcer, because it is found to be ineffective on the other ulcers, such as leg ulcers and decubital ulcers.

CONCEPT CODE: Radiation biology - Radiation effects and protective measures 06506  
Biochemistry studies - Proteins, peptides and amino acids 10064  
Enzymes - General and comparative studies: coenzymes 10802  
Pathology - Inflammation and inflammatory disease 12508  
Pathology - Therapy 12512  
Integumentary system - Pathology 18506  
Pharmacology - Clinical pharmacology 22005  
Pharmacology - Integumentary system, dental and oral biology 22020

INDEX TERMS: Major Concepts  
Biochemistry and Molecular Biophysics; Dermatology (Human Medicine, Medical Sciences); Enzymology (Biochemistry and Molecular Biophysics); Pathology; Pharmacology  
INDEX TERMS: Miscellaneous Descriptors  
HUMAN DERMATOLOGICAL-DRUG RADIOTHERAPY

ORGANISM: Classifier  
Hominidae 86215  
Super Taxa  
Primates; Mammalia; Vertebrata; Chordata; Animalia  
Taxa Notes  
Animals, Chordates, Humans, Mammals, Primates,  
Vertebrates

REGISTRY NUMBER: 303-98-0 (COENZYME Q10)  
303-98-0 (COQ 10)

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ACCESSION NUMBER: 1984:284579 BIOSIS Full-text  
DOCUMENT NUMBER: PREV198478021059; BA78:21059  
TITLE: DOXORUBICIN INDUCED SKIN ULCER IN THE PIGLET.  
AUTHOR(S): OKANO T [Reprint author]; OHNUMA T; EFREMIDIS A; HOLLAND J F  
CORPORATE SOURCE: DEP OF NEOPLASTIC DISEASES, MOUNT SINAI SCH OF MED, 1 GUSTAVE L LEVY P1, NEW YORK, NY 10029, USA  
SOURCE: Cancer Treatment Reports, (1983) Vol. 67, No. 12, pp. 1075-1078.  
CODEN: CTRRDO. ISSN: 0361-5960.

DOCUMENT TYPE: Article  
FILE SEGMENT: BA  
LANGUAGE: ENGLISH

ABSTRACT:Skin ulceration produced by inadvertently extravasated doxorubicin is

characterized by a prolonged course accompanied by severe morbidity, and it has proven to be notoriously difficult to treat. In attempts to identify possible antidotes, 11 different pharmacologic agents [carnitine, coenzyme Q10, deferoxamine mesylate, dimethyl sulfoxide (DMSO), dopamine, DNA type V, human serum albumin, iron dextran, isoproterenol, NaHCD3,  $\alpha$ -tocopherol] were tested using piglets, because their skin is anatomically similar to that of man. Among the agents studied, topical application of DMSO daily for 7 days tended to decrease the maximal diameter and accelerate healing of skin ulcers produced by intradermal doxorubicin.  $\alpha$ -Tocopherol appeared to worsen the ulceration. None of the 11 agents studied prevented the development of ulcerations completely.

**CONCEPT CODE:**

- Biochemistry studies - General 10060
- Biochemistry studies - Nucleic acids, purines and pyrimidines 10062
- Biochemistry studies - Vitamins 10063
- Biochemistry studies - Proteins, peptides and amino acids 10064
- Biochemistry studies - Lipids 10066
- Biochemistry studies - Carbohydrates 10068
- Biochemistry studies - Minerals 10069
- Enzymes - General and comparative studies: coenzymes 10802
- Pathology - Inflammation and inflammatory disease 12508
- Pathology - Therapy 12512
- Blood - Blood and lymph studies 15002
- Integumentary system - General and methods 18501
- Integumentary system - Pathology 18506
- Pharmacology - Integumentary system, dental and oral biology 22020
- Routes of immunization, infection and therapy 22100
- Toxicology - Pharmacology 22504
- Toxicology - Antidotes and prevention 22505
- Neoplasms - Therapeutic agents and therapy 24008
- Chemotherapy - General, methods and metabolism 38502

**INDEX TERMS:**

- Major Concepts
  - Integumentary System (Chemical Coordination and Homeostasis); Pathology; Pharmacology; Toxicology; Tumor Biology
- Miscellaneous Descriptors
  - CARNITINE COENZYME Q-10 DEFEROXAMINE MESYLATE DI METHYL SULFOXIDE DOPAMINE DNA HUMAN SERUM ALBUMIN IRON DEXTRAN ISOPROTERENOL SODIUM BI CARBONATE ALPHA TOCOPHEROL ANTIDOTE ANTI NEOPLASTIC-DRUG DRUG EXTRAVASATION/

**ORGANISM:**

- Classifier
  - Suidae 85740
- Super Taxa
  - Artiodactyla; Mammalia; Vertebrata; Chordata; Animalia
- Taxa Notes
  - Animals, Artiodactyls, Chordates, Mammals, Nonhuman Vertebrates, Nonhuman Mammals, Vertebrates

**REGISTRY NUMBER:**

- 23214-92-8 (DOXORUBICIN)
- 541-15-1 (CARNITINE)
- 303-98-0 (COENZYME Q-10)
- 138-14-7 (DEFEROXAMINE MESYLATE)
- 67-68-5 (DIMETHYL SULFOXIDE)
- 51-61-6 (DOPAMINE)
- 9004-66-4 (IRON DEXTRAN)
- 7683-59-2 (ISOPROTERENOL)
- 144-55-8 (SODIUM BICARBONATE)
- 59-02-9 (ALPHA-TOCOPHEROL)



10/597378

=> d his full

(FILE 'HOME' ENTERED AT 11:17:49 ON 29 MAR 2010)

FILE 'ZCPLUS' ENTERED AT 11:20:47 ON 29 MAR 2010  
E US2008-597378/APPS

L1 1 SEA SPE=ON ABB=ON PLU=ON US2008-597378/AP  
D SCA

FILE 'REGISTRY' ENTERED AT 11:22:03 ON 29 MAR 2010  
L2 2 SEA SPE=ON ABB=ON PLU=ON COENZYME Q/CN OR 303-98-0  
D SCA

L3 0 SEA SPE=ON ABB=ON PLU=ON UBIQUINONE/CN  
E UBIQUINONE/CN

L4 15 SEA SPE=ON ABB=ON PLU=ON UBIQUINONE###/CN  
D SCA  
D SCA L2  
D IDE L2 1-2  
E UBIQUINONE/CN

L5 2 SEA SPE=ON ABB=ON PLU=ON UBIQUINONE 10/CN  
D SCA  
D IDE 1-2  
E COENZYMEQ10/CN  
E COENZYME Q10/CN

L6 1 SEA SPE=ON ABB=ON PLU=ON COENZYME Q10/CN  
L7 5 SEA SPE=ON ABB=ON PLU=ON COENZYME Q10?/CN  
D SCA L6  
D SCA L7  
D SCA L6

L8 2 SEA SPE=ON ABB=ON PLU=ON L7 AND C59 H90 O4/MF  
D SCA

L9 3 SEA SPE=ON ABB=ON PLU=ON L7 NOT L8  
D SCA  
D SCA L2

L10 3 SEA SPE=ON ABB=ON PLU=ON L2 OR L8  
L11 17 SEA SPE=ON ABB=ON PLU=ON (L4 OR L5 OR L6 OR L7) NOT L8  
D SCA

L12 1 SEA SPE=ON ABB=ON PLU=ON L11 AND ?DIOL?/CNS  
D SCA

L13 16 SEA SPE=ON ABB=ON PLU=ON L11 NOT L12  
D SCA  
SEL RN L8

L14 58 SEA SPE=ON ABB=ON PLU=ON (27696-12-4/CRN OR 303-98-0/CRN)  
D RN L8 1  
D IDE L8 1  
D IDE L8 2

L15 STRUCTURE UPLOADED

L16 5 SEA FAM SAM L15  
D SCA

L17 83 SEA FAM FUL L15

L18 81 SEA SPE=ON ABB=ON PLU=ON L17 NOT L8

L19 0 SEA SPE=ON ABB=ON PLU=ON L18 AND L12

FILE 'ZCPLUS' ENTERED AT 11:50:03 ON 29 MAR 2010

L20 5712 SEA SPE=ON ABB=ON PLU=ON L17

L21 2380 SEA SPE=ON ABB=ON PLU=ON L17 (L) (THU OR DMA OR BAC OR PKT  
OR PAC OR FFD) /RL

10/597378

L22 139854 SEA SPE=ON ABB=ON PLU=ON (?LEUKAEM?/BI OR ?LEUKEM?/BI)  
L23 502215 SEA SPE=ON ABB=ON PLU=ON ?CANCER?/BI  
L24 781886 SEA SPE=ON ABB=ON PLU=ON ?TUMOUR?/BI OR ?TUMOR?/BI  
L25 62114 SEA SPE=ON ABB=ON PLU=ON ?SARCOMA?/BI  
L26 645501 SEA SPE=ON ABB=ON PLU=ON ?NEOPLAS?/BI  
L27 360843 SEA SPE=ON ABB=ON PLU=ON ?CARCINO?/BI  
L28 28213 SEA SPE=ON ABB=ON PLU=ON ?MYELOM?/BI  
L29 52342 SEA SPE=ON ABB=ON PLU=ON ?LYMPHOMA?/BI  
L30 46413 SEA SPE=ON ABB=ON PLU=ON ?MELANOM?/BI  
L31 66132 SEA SPE=ON ABB=ON PLU=ON ?ANGIOGEN?/BI  
L32 200452 SEA SPE=ON ABB=ON PLU=ON CELL PROLIFER?/BI  
L33 311 SEA SPE=ON ABB=ON PLU=ON L21 AND (L22 OR L23 OR L24 OR L25  
OR L26 OR L27 OR L28 OR L29 OR L30 OR L31 OR L32)  
L34 123 SEA SPE=ON ABB=ON PLU=ON L33 AND P/DT AND (PRD<20050121 OR  
PD<20050121 OR AD<20050121)  
L35 166 SEA SPE=ON ABB=ON PLU=ON L33 AND PY<2006  
L\*\*\* DEL 131 S L33 AND PY<2005  
L36 183 SEA SPE=ON ABB=ON PLU=ON (L34 OR L35)  
L37 30 SEA SPE=ON ABB=ON PLU=ON L36 AND ?TOPICAL?/BI

FILE 'MEDLINE, EMBASE, BIOSIS' ENTERED AT 11:59:53 ON 29 MAR 2010

FILE 'REGISTRY' ENTERED AT 11:59:59 ON 29 MAR 2010

SET SMARTSELECT ON  
L38 SEL PLU=ON L17 1- CHEM : 120 TERMS  
SET SMARTSELECT OFF

FILE 'MEDLINE, EMBASE, BIOSIS' ENTERED AT 12:00:12 ON 29 MAR 2010

L39 10721 SEA SPE=ON ABB=ON PLU=ON L38  
L40 1098 SEA SPE=ON ABB=ON PLU=ON L39 AND (L22 OR L23 OR L24 OR L25  
OR L26 OR L27 OR L28 OR L29 OR L30 OR L31 OR L32)  
L41 34 SEA SPE=ON ABB=ON PLU=ON L40 AND ?TOPICAL?  
L42 23 SEA SPE=ON ABB=ON PLU=ON L39 (L) TP/CT  
L43 14 SEA SPE=ON ABB=ON PLU=ON L40 AND ?TOPICAL?/AB, TI  
L44 11 SEA SPE=ON ABB=ON PLU=ON L40 AND L42  
L45 21 SEA SPE=ON ABB=ON PLU=ON (L43 OR L44)  
L46 13 SEA SPE=ON ABB=ON PLU=ON L41 NOT L45  
L47 27 SEA SPE=ON ABB=ON PLU=ON L40 AND TOPICAL DRUG ADMINISTRATION  
/CT

FILE 'ZCAPLUS' ENTERED AT 12:08:06 ON 29 MAR 2010

SET NOTICE OFF DISPLAY  
SET NOTICE OFF SEARCH  
L48 228 SEA SPE=ON ABB=ON PLU=ON HSIA S?/AU, AUTH  
L49 89 SEA SPE=ON ABB=ON PLU=ON NARAIN N?/AU, AUTH  
L50 81413 SEA SPE=ON ABB=ON PLU=ON LI J?/AU, AUTH  
L51 704 SEA SPE=ON ABB=ON PLU=ON RUSSELL K?/AU, AUTH  
L52 5 SEA SPE=ON ABB=ON PLU=ON WOAN K?/AU, AUTH  
L53 9 SEA SPE=ON ABB=ON PLU=ON PERSAUD I?/AU, AUTH  
L54 1 SEA SPE=ON ABB=ON PLU=ON L48 AND L49 AND L50 AND L51 AND  
L52 AND L53  
L55 2 SEA SPE=ON ABB=ON PLU=ON L48 AND (L49 OR L50 OR L51 OR L52  
OR L53)  
L56 6 SEA SPE=ON ABB=ON PLU=ON L49 AND (L50 OR L51 OR L52 OR L53)  
  
L57 6 SEA SPE=ON ABB=ON PLU=ON L50 AND (L51 OR L52 OR L53)  
L58 1 SEA SPE=ON ABB=ON PLU=ON L51 AND (L52 OR L53)  
L59 1 SEA SPE=ON ABB=ON PLU=ON L52 AND L53  
L60 11 SEA SPE=ON ABB=ON PLU=ON L55 OR L56 OR L57 OR L58 OR L59

10/597378

FILE 'MEDLINE, EMBASE, BIOSIS, WPIX' ENTERED AT 12:09:06 ON 29 MAR 2010  
L61 862 SEA SPE=ON ABB=ON PLU=ON HSIA S?/AU,AUTH  
L62 107 SEA SPE=ON ABB=ON PLU=ON NARAIN N?/AU,AUTH  
L63 92982 SEA SPE=ON ABB=ON PLU=ON LI J?/AU,AUTH  
L64 1996 SEA SPE=ON ABB=ON PLU=ON RUSSELL K?/AU,AUTH  
L65 16 SEA SPE=ON ABB=ON PLU=ON WOAN K?/AU,AUTH  
L66 28 SEA SPE=ON ABB=ON PLU=ON PERSAUD I?/AU,AUTH  
L67 8 SEA SPE=ON ABB=ON PLU=ON L61 AND L62 AND L63 AND L64 AND  
L65 AND L66  
L68 11 SEA SPE=ON ABB=ON PLU=ON L61 AND (L62 OR L63 OR L64 OR L65  
OR L66)  
L69 19 SEA SPE=ON ABB=ON PLU=ON L62 AND (L63 OR L64 OR L65 OR L66)  
  
L70 28 SEA SPE=ON ABB=ON PLU=ON L63 AND (L64 OR L65 OR L66)  
L71 10 SEA SPE=ON ABB=ON PLU=ON L64 AND (L65 OR L66)  
L72 8 SEA SPE=ON ABB=ON PLU=ON L65 AND L66  
L73 38 SEA SPE=ON ABB=ON PLU=ON L68 OR L69 OR L70 OR L71 OR L72  
L74 11 SEA SPE=ON ABB=ON PLU=ON L68 AND (L69 OR L70 OR L71 OR L72)  
  
L75 10 SEA SPE=ON ABB=ON PLU=ON L69 AND (L70 OR L71 OR L72)  
L76 9 SEA SPE=ON ABB=ON PLU=ON L70 AND (L71 OR L72)  
L77 8 SEA SPE=ON ABB=ON PLU=ON L71 AND L72  
L78 11 SEA SPE=ON ABB=ON PLU=ON L74 OR L75 OR L76 OR L77  
SET NOTICE LOGIN DISPLAY  
SET NOTICE LOGIN SEARCH

FILE 'MEDLINE, EMBASE, BIOSIS' ENTERED AT 12:09:50 ON 29 MAR 2010  
L79 11 SEA SPE=ON ABB=ON PLU=ON L41 AND PY<2006  
L80 2 SEA SPE=ON ABB=ON PLU=ON L41 AND (L61 OR L62 OR L63 OR L64  
OR L65 OR L66)  
L81 29 SEA SPE=ON ABB=ON PLU=ON L39 AND (L61 OR L62 OR L63 OR L64  
OR L65 OR L66)  
L82 12 SEA SPE=ON ABB=ON PLU=ON L40 AND (L61 OR L62 OR L63 OR L64  
OR L65 OR L66)

FILE 'ZCPLUS' ENTERED AT 12:12:55 ON 29 MAR 2010  
L83 18 SEA SPE=ON ABB=ON PLU=ON (L48 OR L49 OR L50 OR L51 OR L52  
OR L53) AND L17  
L84 4 SEA SPE=ON ABB=ON PLU=ON (L48 OR L49 OR L50 OR L51 OR L52  
OR L53) AND L33

FILE 'REGISTRY' ENTERED AT 12:14:21 ON 29 MAR 2010

FILE 'ZCPLUS' ENTERED AT 12:14:24 ON 29 MAR 2010  
D STAT QUE L60  
D STAT QUE L83  
D STAT QUE L84  
L85 24 SEA SPE=ON ABB=ON PLU=ON L60 OR L83 OR L84

FILE 'MEDLINE, EMBASE, BIOSIS, WPIX' ENTERED AT 12:15:03 ON 29 MAR 2010  
D STAT QUE L78

FILE 'MEDLINE, EMBASE, BIOSIS' ENTERED AT 12:16:16 ON 29 MAR 2010  
D STAT QUE L80  
D STAT QUE L82  
L86 12 SEA SPE=ON ABB=ON PLU=ON L80 OR L82

FILE 'MEDLINE, EMBASE, BIOSIS, WPIX' ENTERED AT 12:17:03 ON 29 MAR 2010  
D STAT QUE L78

10/597378

FILE 'ZCPLUS, BIOSIS, WPIX' ENTERED AT 12:17:18 ON 29 MAR 2010  
L87           37 DUP REM L85 L86 L78 (10 DUPLICATES REMOVED)  
              ANSWERS '1-24' FROM FILE ZCPLUS  
              ANSWERS '25-37' FROM FILE BIOSIS  
D IBIB ABS HITIND HITSTR L87 1-24  
D IALL L87 25-37

FILE 'REGISTRY' ENTERED AT 12:18:59 ON 29 MAR 2010

FILE 'ZCPLUS' ENTERED AT 12:19:03 ON 29 MAR 2010  
D STAT QUE L37

FILE 'MEDLINE, EMBASE, BIOSIS' ENTERED AT 12:19:18 ON 29 MAR 2010  
D STAT QUE L79

FILE 'ZCPLUS, EMBASE, BIOSIS' ENTERED AT 12:19:26 ON 29 MAR 2010  
L88           41 DUP REM L37 L79 (0 DUPLICATES REMOVED)  
              ANSWERS '1-30' FROM FILE ZCPLUS  
              ANSWERS '31-37' FROM FILE EMBASE  
              ANSWERS '38-41' FROM FILE BIOSIS  
D IBIB ABS HITIND HITSTR L88 1-30  
D IALL L88 31-41

FILE HOME

FILE ZCPLUS

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FILE COVERS 1907 - 29 Mar 2010 VOL 152 ISS 14  
FILE LAST UPDATED: 28 Mar 2010 (20100328/ED)  
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Dec 2009  
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Dec 2009

ZCAplus now includes complete International Patent Classification (IPC) reclassification data for the first quarter of 2010.

CAS Information Use Policies apply and are available at:

<http://www.cas.org/legal/infopolicy.html>

This file contains CAS Registry Numbers for easy and accurate substance identification.

FILE REGISTRY  
Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 28 MAR 2010 HIGHEST RN 1214990-69-8  
DICTIONARY FILE UPDATES: 28 MAR 2010 HIGHEST RN 1214990-69-8

10/597378

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 8, 2010.

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

FILE MEDLINE

FILE LAST UPDATED: 27 Mar 2010 (20100327/UP). FILE COVERS 1949 TO DATE.

MEDLINE and LMEDLINE have been updated with the 2010 Medical Subject Headings (MeSH) vocabulary and tree numbers from the U.S. National Library of Medicine (NLM). Additional information is available at

[http://www.nlm.nih.gov/pubs/techbull/nd09/nd09\\_medline\\_data\\_changes\\_2010.html](http://www.nlm.nih.gov/pubs/techbull/nd09/nd09_medline_data_changes_2010.html)

The Medline file has been reloaded effective January 24, 2010. See HELP RLOAD for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

See HELP RANGE before carrying out any RANGE search.

FILE EMBASE

FILE COVERS 1974 TO 26 Mar 2010 (20100326/ED)

EMBASE is now updated daily. SDI frequency remains weekly (default) and biweekly.

This file contains CAS Registry Numbers for easy and accurate substance identification.

For further assistance, please contact your local helpdesk.

FILE BIOSIS

FILE COVERS 1926 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1926 TO DATE.

RECORDS LAST ADDED: 24 March 2010 (20100324/ED)

BIOSIS has been augmented with 1.8 million archival records from 1926 through 1968. These records have been re-indexed to match current BIOSIS indexing.

FILE WPIX

FILE LAST UPDATED: 26 MAR 2010 <20100326/UP>

MOST RECENT UPDATE: 201021 <201021/DW>

DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

>>> Now containing more than 1.5 million chemical structures in DCR <<<

>>> IPC, ECLA, US National Classifications and Japanese F-Terms

and FI-Terms have been updated with reclassifications to end of December 2009.

No update date (UP) has been created for the reclassified documents, but they can be identified by specific update codes (see HELP CLA for details) <<<

>>> FOR THE LATEST DERWENT WORLD PATENTS INDEX (DWPI)  
STN USER DOCUMENTATION, PLEASE VISIT:  
[<<](http://www.stn-international.com/stn_dwpi.html)

>>> HELP for European Patent Classifications see HELP ECLA, HELP ICO <<<

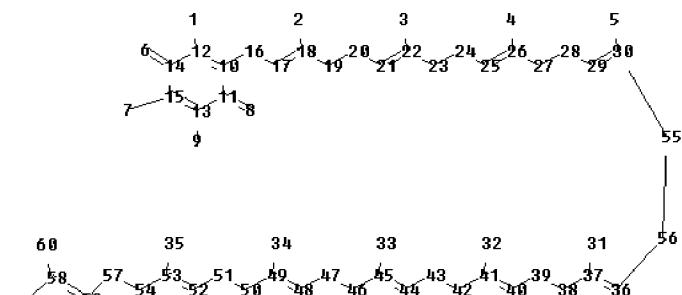
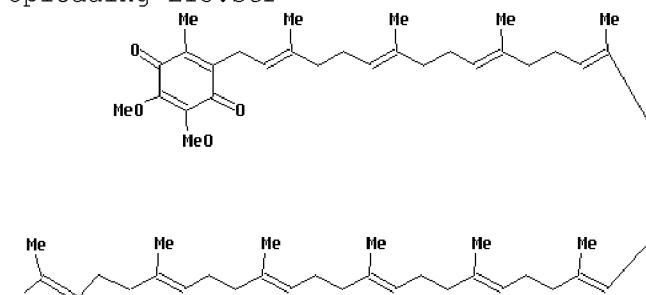
>>> Japanese FI-TERM thesaurus in field /FCL added <<<

>>> New display format ALLSTR available - see NEWS <<<

>>> US National Patent Classification thesaurus added - see NEWS <<<

$\Rightarrow$

Uploading L15.str



chain nodes :

```

chain nodes :
1 2 3 4 5 6 7 8 9 16 17 18 19 20 21 22 23 24 25 26 27 28 29
30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50
51 52 53 54
55 56 57 58 59 60 61

```

55 56 57

ring nodes :

10 11 12

chain bonds :  
 1-12 2-18 3-22 4-26 5-30 6-14 7-15 8-11 9-13 10-16 16-17 17-18 18-19  
 19-20 20-21 21-22 22-23 23-24 24-25 25-26 26-27 27-28 28-29 29-30 30-55  
 31-37 32-41  
 33-45 34-49 35-53 36-37 36-56 37-38 38-39 39-40 40-41 41-42 42-43 43-44  
 44-45 45-46 46-47  
 47-48 48-49 49-50 50-51 51-52 52-53 53-54 54-57 55-56 57-59 58-59 58-60  
 58-61

ring bonds :

Ring bonds : 10-11 10-12 11-13 12-14 13-15 14-15

exact/norm\_bonds :

exact/norm bonds : 6-14 8-11 10-11 10-12 11-13 12-14 13-15 14-15

exact bonds :

exact bonds :

|       |       |       |       |       |       |       |       |       |       |       |       |       |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1-12  | 2-18  | 3-22  | 4-26  | 5-30  | 7-15  | 9-13  | 10-16 | 16-17 | 17-18 | 18-19 | 19-20 | 20-21 |
| 21-22 | 22-23 | 23-24 | 24-25 | 25-26 | 26-27 | 27-28 | 28-29 | 29-30 | 30-55 | 31-37 | 32-41 |       |
| 33-45 | 34-49 |       |       |       |       |       |       |       |       |       |       |       |
| 35-53 | 36-37 | 36-56 | 37-38 | 38-39 | 39-40 | 40-41 | 41-42 | 42-43 | 43-44 | 44-45 | 45-46 |       |
| 46-47 | 47-48 |       |       |       |       |       |       |       |       |       |       |       |
| 48-49 | 49-50 | 50-51 | 51-52 | 52-53 | 53-54 | 54-57 | 55-56 | 57-59 | 58-59 | 58-60 | 58-61 |       |

10/597378

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:CLASS 17:CLASS 18:CLASS  
19:CLASS 20:CLASS  
21:CLASS 22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS  
29:CLASS 30:CLASS  
31:CLASS 32:CLASS 33:CLASS 34:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS  
39:CLASS 40:CLASS  
41:CLASS 42:CLASS 43:CLASS 44:CLASS 45:CLASS 46:CLASS 47:CLASS 48:CLASS  
49:CLASS 50:CLASS  
51:CLASS 52:CLASS 53:CLASS 54:CLASS 55:CLASS 56:CLASS 57:CLASS 58:CLASS  
59:CLASS 60:CLASS  
61:CLASS